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# The Quality of School Life Scale as a predictive indicator of student disengagement from school

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# The Quality of School Life Scale as a Predictive Indicator of Student Disengagement from School

by
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# ABSTRACT

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The Quality of School Life Scale as a Predictive Indicator
of Student Disengagement from School
1999
Dr. Theodore Johnson, University Mentor
School Administration

The purpose of this ex post facto, action research project is to test the hypothesis that the Quality of School Life Scale (Epstein & McPartland, 1976) has the predictive capability to identify students, early in a school year, who later in the school year manifest traditional disengaged behaviors. If the hypothesis is supported and students who, as a group, score lower on the QSL Scale display significantly more traditional disengaged behaviors than higher scoring students, the finding would support using the QSL as a proactive assessment tool to identify students who are at-risk for disengagement.

This study has several phases: the administration of a survey to a class of 420 sophomores of a suburban high school; a "wait and see" period of time of approximately four months; data collection of behavioral manifestations of disengagement; and statistical analysis of the data using correlations, means/anova/t-tests, crosstabulations and percentages, chi-squares, and discriminant analysis.

The QSL scale predicted disengaged behaviors with 69% accuracy. The findings indicate that traditional indicators of disengagement may not be the best indicators . . . that there are silently disengaged students who do not act out in school.

MINI-ABSTRACT

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The purpose is to test the predictive capability of the Quality of School Life Scale (Epstein & McPartland, 1976) to identify students, early in a school year, who later in the school year manifest traditional disengaged behaviors. The QSL scale predicted disengaged behaviors with 69% accuracy. Findings indicated that traditional indicators may not be the best indicators. The scale identified silently disengaged students who did not act disengaged.

# TO MY TEACHER

DR. JOYCE RIGDON
ROWAN UNIVERSITY
INSTITUTIONAL RESEARCH AND PLANNING

WHAT A PRIVILEGE IT WAS TO EXPERIENCE GROWTH
AT THE VERY END OF MY PROGRAM.

WITH ONE FOOT OUT THE DOOR,
YOU REELED ME IN
AND ENGAGED ME IN THE PURSUIT OF ACCOMPLISHMENT.

TETHERED, I JOURNEYED IN A THOUSAND DIRECTIONS.
YOU KNEW JUST WHEN AND WHY TO YANK ME BACK.

YOU ENABLED ME TO FEEL THE PROCESS OF LEARNING.
THIS MAKES YOU A TEACHER OF THE HIGHEST ORDER.

AFTER SEEING HOW IT HAPPENED TO ME,
I REALIZE HOW RARELY IT HAPPENS.

YOUR PATIENCE AMAZED ME.

WITH DEEPEST GRATITUDE,

SANDRA LAZAR
ROWAN UNIVERSITY
EDUCATIONAL ADMINISTRATION AND LEADERSHIP
1999

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# Chapter 1 Introduction

## Focus of the Study

Educational research has shown, beyond a doubt, that student engagement in school, meaning student satisfaction with and commitment to school, is a vital prerequisite to student success in school. Within the school culture of this study's population, success, generally defined as achieving one's personal best in school, is traditionally measured by test scores and grades, attendance and punctuality, and disciplinary records. To rely on these indicators as measures of success in school requires a "wait and see" approach. When there is failure, in academic or social domains, intervention and remediation come after the fact . . . sometimes too late to make a difference.

Students decide the amount of effort, attention, and interest they will put into their school work . . . they decide to come to school or not, to pay attention in class or not, to take the curriculum seriously or not, and to focus on grades or not (Doyle, 1986). Clearly, if students are not engaged in the activities of the school, the school cannot affect the outcomes it tries to produce.

Disengagement is defined as the extent to which students refrain from participating in and committing to the academic and social programs of the school, activities associated with the common roles of scholar and citizen, and the more specialized roles inherent in extracurricular activities (Natriello, 1981). Steinberg (1996) contrasts engaged and disengaged students: "Highly engaged students concentrate on the task at hand, strive to

do their best when tested or called upon, and do their homework and assignments on time and in good faith. They participate in class discussions, think about the material covered in their courses, and genuinely care about the quality of their work. Disengaged students do only as much as it takes to avoid getting into trouble. They do not exert much effort in their classes, are easily distracted during class, and expend little energy on in-school or out-of-school assignments. They have a cavalier attitude toward education and its importance to their future success or personal development. When in school, they just go through the motions . . . view the school as a nuisance, and place school low, if not at the absolute bottom, of their list of priorities. When they are not in school, school is the last thing on their mind. It's not that students are less able or intelligent than students of past generations . . . they are less interested in being educated" (Steinberg, 1996).

Newman (1992) takes the definition of engagement one step further. He argues that, "Engagement involves psychological investment in learning, comprehending, or mastering knowledge, skills, and crafts, not simply a commitment to complete assigned tasks or to acquire symbols of high performance such as grades or social approval. Students may complete academic work and perform well without being engaged. A significant body of research indicates that students invest much of their energy in performing rituals, procedures, and routines without developing substantive understanding."

This leads one to think about whether all disengaged students display disaffected behaviors. Could students who the principal never sees be just as disengaged from school as the ones she knows too well? Is there an invisible kind of disengagement . . . a quiet

and covert kind that does not manifest itself in cutting, lateness, absence, or misconduct? If educators are charged with the responsibility to help all students succeed and do their personal best in school, are they negligent in waiting for signs of disengagement if those signs never come?

Given that an ounce of prevention is worth a pound of cure, it makes a whole lot of sense to try to thwart disengagement before it takes root. To do that, one must have a method by which students, who are at-risk for disengagement, can be identified. This study, based on suggestive findings and implications in the literature, tests a proactive method of identify students, early on, who are likely to be among those who would prove, later on, to be disengaged from school.

Although much has been written on the subject of disengagement, its causes and its cures, very little is available in the way of user-friendly instruments that enable an educator to identify students within a school who are at-risk for disengagement. In 1978, two educational researchers, Joyce L. Epstein and James M. McPartland, released a scale they developed, entitled, "The Quality Of School Life Scale." The scale measures students' general reactions to school, to their classwork, and to their teachers. This Quality of School Life (QSL) Scale was designed upon the premise that the quality of students' experiences in school influence their behavior, attitudes, and learning: "Thinking positively about school, classwork, and teachers . . . may enhance school related behaviors and learning . . . thinking negatively about school may make [students'] life in school unsatisfactory and act as a barrier to learning and motivation to succeed (Epstein & McPartland, 1978).

Epstein and McPartland (1978) suggest several uses for their scale. Among them, they suggest that the QSL may assist educators in the identification of potential dropouts. They contend that low QSL scores, combined with other measures of achievement and ability, may flag students who may benefit from special attention or intervention programs designed to increase motivation and interest in staying in school. To support their claim, they cite an early study by Hollingshead (1949) that shows that negative reactions to teachers and dissatisfaction with the school program to be two important factors related to student withdrawal from school. Much of current educational literature on student disengagement seems to expand the definition of physical withdrawal from school to include mental or attitudinal withdrawal, as well.

At the time the scale was developed, Epstein and McPartland (1978) were cautious about claiming that the QSL had predictive capabilities, since long term follow up studies on QSL scores had not been conducted. However, they did contend that low QSL scores one year are related to adjustment problems in school one year later: "When compared with students with high QSL scores, students with low QSL scores one year are more apt the next year to be sent to the office, cut classes, cut school, be scolded in class for many infractions, be suspended, or give themselves low grades in classroom behavior" (Epstein & McPartland, 1978). They conclude with, ". . . the usefulness of QSL scores for early identification of students who are likely to continue to be engaged in disciplinary incidents is suggested."

Mosher and MacGowan (1985), in a frustrating effort to locate and review pertinent literature on disengagement, recognize the significance of the QSL scale and the

strong correlations it draws between how much students like school and their performance, participation, and achievement in school. They conclude that they could not get any closer to an explanation of engagement than that which is provided in Epstein and McPartland's work. The review of the literature since 1985 to the present, does not provide any other source to support the validity of the QSL in predicting disengaged behaviors. This study makes an attempt.

Purpose of the Study

After establishing that engagement is a relevant issue for today's educators, that it is a vital prerequisite for student learning and success in school, and that educators need a way to identify students who are at-risk for disengagement early in a school year, the primary purpose of this theory based, ex post facto, action research project is to test the hypothesis that the Quality of School Life Scale (Epstein & McPartland, 1976) has the predictive capability to identify students, early in a school year, who later in the school year manifest traditional disengaged behaviors. The use of the Quality of School Life Scale to indicate potential disengagement from school is based on the premise that positive reactions to school increase the likelihood that students will succeed in school, develop motivation and lasting commitment to learning, use the school to advantage, and be involved and productive (Epstein & McPartland, 1976; J. L. Epstein, personal communication, June 29, 1998); and that scores on the QSL scale suggest students' pre-dispositions to act out or react in positive, negative, or neutral ways to school and school activities (Epstein & McPartland, 1978). If the hypothesis is supported and students who, as a group, score lower on the QSL Scale display significantly more traditional disengaged

behaviors, or traditional indicators, than the higher scoring students, the finding would support the use of the QSL as a proactive assessment tool to identify students who are at-risk for disengagement from school. Keeping in mind the definitive observations of Newman and Steinberg, cited above, the absence of a record of traditional indicators for individuals scoring low on the QSL, would support a second hypothesis that there are students who behave and perform well, but are silently disengaged from school.

This study has several phases: the administration of a three-part survey to a sophomore class in a suburban high school in November, 1998, several weeks prior to the end of the first marking period; a "wait and see" period of time of approximately four months; the collection of documented behavioral manifestations of disengagement, on all the students in the class, in mid-March of 1999; followed by a statistical analysis of the data. A copy of the survey is located in Appendix A.

Part one of the survey consists of the first 27 items of the QSL scale. Part two of the survey contains supplemental survey items, compiled by this intern from other student opinion instruments, to obtain information from students on demographics and on variables identified by the literature to be factors that contribute to disengagement from school, and to test for reliability and validity. Part three of the survey is the 28th item of the original QSL scale and calls for a written narrative from students on why they like or dislike school. The responses to parts two and three were not used in calculating the QSL scores.

Verifying results from other sources or perspectives enhances validity (Wiersma, 1995). Validity was tested, using part two items, in three ways. Firstly, ten items were

created and included to solicit information on the degree to which students relate to in and out of school conditions that contribute toward disengagement from school. The third hypothesis of this study is that there will be statistically significant correlations between the responses to these literature variables and the QSL scores. Secondly, eight items, with face validity to the QSL scale, were taken from another valid and reliable student opinion scale and used to check for reliability. This intern also contacted Dr. Laurence Steinberg, at Temple University, to acquire a copy of the survey instrument he used in his most recent disengagement study, which he published in 1996. Dr. Steinberg was kind to offer a short version of his instrument for use in this study. A copy of his short scale is located in Appendix B. Thirdly, then, six questions from his scale were reformatted and also included in part two of this study's survey instrument. Significant relationships between responses to Dr. Steinberg's items and QSL score would support confidence in the findings, especially in the absence of traditional indicators and/or significant relationships with literature variables. Therefore, a fourth hypothesis holds that the validity of the QSL scores to identify students at-risk for disengagement from school, will be supported by statistically significant responses given to items from Dr. Steinberg's instrument.

Definitions

The review of the literature, in Chapter 2, identifies a multitude of independent variables for this study, as well as expounds on the definition of disengagement. It is sufficient at this point to say that after the fact, the disengaged are easy to spot. The description of the variables used in this study are presented in Chapter 3.

The traditional indicators of disengagement are all too familiar. Misconduct, cutting class, lateness, and absenteeism are signs of disengagement from school (Natriello & Scott, 1981), and suspensions are indicators of student discontent with their educational environment (Rosado, 1991). The traditional indicators, as well as the literature variables, used in this study are supported in Chapter 2, the review of the literature, and defined for use in Chapter 3, the design of the study.

Limitations of the Study

Disengagement fluctuates, varies, and develops, so it should be studied longitudinally, over time, rather than cross-sectionally, as a snapshot in time (Mosher & Gowen, 1985). Although a longitudinal study would be ideal in terms of establishing norms and would offer a more complete picture of student disengagement throughout the high school experience, a cross-sectional approach is the only available option at this time.

Mosher and MacGowan (1985) identify several other limitations in their review of studies on disengagement: 1. The causes of disengagement, rooted in society, the family, the student, the school, and the classroom are complex issues in and of themselves. 2. Combinations of different social-psychological factors and school structure and functions may have different effects on individual students and groups of students. 3. Many more possible variables that contribute to disengagement may be unknown and missing from research. 4. Although often studied separately, the variables are interactive and inseparable. 5. Disengagement is a variable dependent on multiple determinants. 6. Some variables are within the school's power to affect and some are not. Researchers

caution not to over interpret findings or reach for causal relationships based on the findings of a single study (Thorkildsen &Stein, 1998).

The sophomore class was selected for several reasons. First, a university mentor advised that one grade level would be manageable in a first time effort by an intern (personal communication, R. L. Capasso, June 8, 1998). Second, the author of the QSL concurred, suggesting that only one grade level be studied (J. L. Epstein, personal communication, June 29, 1998). Third, this intern's field mentor was the principal for the sophomore class and as such was able to facilitate activities involved in data gathering and evaluation within this class. Fourth, the sophomore class was selected because they have enough experience in the school upon which to base their opinions and more than enough time left to take advantage of any intervention strategies the administration would implement as a result of this study.

Immersion in the field was completed by obtaining permission to work as a vice principal intern at Cherry Hill High School East for the 1998-99 school year. Assurances were given to the staff and students that the information gathered would be used for school improvement, all documentation would be descriptive rather than evaluative, and the sources of all information would never be revealed. It was anticipated that the students and staff would offer full cooperation and assistance.

Since the study was not conducted on a full time basis, rather during the performance of the intern's full-time job and other graduate school responsibilities, time prohibited the analysis and incorporation of Part 3 of the survey instrument, the narratives. Although not used to full advantage, a continuous, informal assessment for reliability was

made to see if the students' written statements supported their chosen answers on the scale, as this intern entered the data of the surveys into the computer. There were no cases of inconsistency found.

Had time allowed, interviews with students, parents, and teachers to further validate student responses and scores on the survey, would have been conducted shortly after the administration of the survey. An attempt at verifying internal reliability was made during the month of February. A random selection of 20 of the 50 students who scored the lowest on the QSL were informally interviewed to find out whether they accurately answered the items on the survey. All students initially responded that they answered accurately. However, after learning that they scored relatively low, two students reported being in a bad mood on the day the survey was administered and to being "too harsh" in their responses to the survey.

Although a small scale trial was conducted, time did not allow for thorough field testing and refinement of the selection and wording of the supplemental survey items. After review of the data and further review of the literature, it became apparent to this intern that some items were not worded as well as they could have been, some items that should have been asked were not, and a few items were of little value. However, in spite of the imperfections, the data that was collected was very rich.

Since the results of this study had to be submitted by the end of March, the data on the traditional indicators was collected in mid-March, instead of (ideally) in June. Needless to say, as the data was being collected, students were generating more of it.

Setting of the Study

Cherry Hill High School East is a comprehensive, fully accredited high school that currently serves approximately 1800 students of diverse heritage. Over the years, the school has been consistently ranked among the state's and nation's finest, recording the highest number of National Merit Semifinalists in the state of New Jersey. The school offers a wide spectrum of academic courses, including advanced placement and honors courses, a remarkable commitment to community service, and a host of extracurricular opportunities, many of which are interwoven with the schools' academic and aesthetic disciplines. Reflecting the values and aspirations of the community, and drawing upon the resources of dedicated, award-winning faculty members and supportive, involved parents, the high school is deeply committed to each student's intellectual, social, and personal growth. The mission statement of the Cherry Hill Public Schools is to provide a quality education program in a positive environment, preparing its students to be knowledgeable, responsible, caring, and confident citizens in an ever-changing world (from the School Profile Brochure, 1997).

However, despite all good intentions, there are signs that the district's mission is not fulfilled for a growing number of students. This belief is based on cumulative school records and first hand, informal observations and conversations with school administrators, teachers, parents, students, and staff. Some teachers comment that an increasing number of students do what they must to get by and are uninterested in schoolwork. Teachers admit to inflating grades to compensate for students' lack academic ability or lack of effort. A peek into classrooms may catch a student with his

head down on the desk, another writing a note to a friend, or aimlessly drawing in a notebook or on a desk. Administrators and their assistants spend countless hours remediating disaffected behaviors such as excessive absenteeism, cutting, lateness, and forms of inappropriate conduct that disrupt the teaching-learning process. Some students say that they hate their teachers, while others say their teachers hate them. Some say that school is a waste of time or not relevant to real life. A small but noticeable percentage litter, vandalize, fight, and steal. Too many appear to be disinterested in school activities. Despite a full array of after school activities, the majority of students run for the door, every afternoon, at dismissal. On any given day, approximately 100 students are absent from school. These observations suggest the presence of the most pressing and immediate issue for educators - student disengagement from school (Newmann, 1992).

Significance of the Study

From personal observations, this intern believes that the 1850 students of Cherry Hill High School East are very diverse in the degree to which they are engaged in the school's program. In light of the district's mission, a responsible educator cannot ignore observations and records identifying student behaviors that are antithetical to the educational purposes and programs of the school . . . observations that make one believe that more students are less committed to learning and more dissatisfied with school than one would expect in a quality school.

Students who arrive late to class detract teachers from instructing during the most beneficial learning time of a class period and disrupt the learning process for other students (Hegna, 1997). Disruptive students hinder their own progress and that of the

other students; successful intervention to prevent disruption is necessary for the general success of the school (Rosado, 1991). The extent to which students try hard in school has a substantial impact on their level of success (Dornbusch, 1974). Increased attendance leads to higher grades, fewer course failures, and better learning (McPartland & Nettles, 1991). Besides the value to the individual learner to do quality work in school, the absence of disengagement has a collective benefit in that the increased engagement of all students in a class positively affects learning for all students in that class (Joyce et al., 1987).

While all students are given equal access to the school's program, it appears as though not all take advantage of the opportunity. Those who participate less and commit to less, gain less and are disadvantaged. They are identifiable and, as such, are discriminated against and harmed if preventative and corrective measures are not attempted (Watkinson, 1997). One may argue that such is the norm in public education today and to expect more is unrealistic. For some, it may be easy to ignore the issue and say it is the students' responsibility to participate and learn . . . that one can only lead a horse to water. However, in light of the district's mission, this scenario is far from acceptable. Not to identify the disengaged and work toward improving their commitment, satisfaction, and attitudes toward school, in the context of equity within diversity, would be reprehensibly negligent.

Students spend a lot of time in school. For learning to occur, students have to tune in, pay attention, and participate in the activities of the school and classroom (Steinberg, 1996). Evidence of student dissatisfactions raise concerns over educational

practices within the school and give school administrators and teachers information regarding school effectiveness and direction for school improvement (Epstein & McPartland, 1978). Longitudinal studies clearly confirm that the level of achievement in high school predicts the level of later accomplishments, and that future accomplishments are related to grades in high school, whatever the student's level of ability (Steinberg, 1996). Given the current focus on educational reform, tolerance of students' less than best effort and attitudes toward school would be a form of silent discrimination in fulfilling the mission of providing a quality education to all students.

Involvement in a research project in school is an engaging activity for students in and of itself. From a developmental perspective, this project is significant in that it will exercise students' social cognition, specifically their ability to make inferences about the causes and meaning of behavior and appearances (abstract and hypothetical thinking); to be introspective and examine their thoughts, feelings, and own point of view (metacognition and egocentrism); and their ability to organize and qualify their opinions and interpret and analyze behavior (Kimmel & Weiner, 1985). Without the stimulation of school activities that encourage abstract thinking, adolescents may fail to attain the capacity for formal operational thought and develop their special talents to the fullest. (Kimmel & Weiner, 1985). Additionally, the data collected in this study may provide insight on curricula implementation, classroom cultures, teacher-pupil relationships, and institutional realities (Ornstein & Levine, 1997). Most significantly, if this study supports the hypotheses that student disengagement is measurable prior to the collection of, or in the absence of traditional indicators (as with the silently disengaged), then a new area of

responsibility to a new type of client is borne.

## Organization of the Study

The next chapter, Chapter 2, presents a review of the literature on the definitions of and the primary reasons for student disengagement. Chapter 3 addresses areas related to the research design and phases of the study. It also describes the research instruments and data collection and analysis methods used. Chapter 4 presents the research findings and answers two major questions: "What information was found?" and "What did it mean?" Chapter 5 presents the study's major conclusions, the corresponding implications, and areas for further study. It also addresses how the school and intern has changed as a result of the study. References, appendices, and the intern's biographical data follow in sequence.

## Chapter 2 Review of the Literature

The issue of student disengagement is not new. John Dewey (1913), in his monograph entitled, "Interest and Effort in Education," wrote about the failure of schools to attract children to the school and its work. He addressed the concern that most children were physically present in school, but only half engrossed and eager to leave as soon as the law allowed. He condemned the belief that economic conditions drove children from schools. Dewey believed that the major problem with schooling was that it failed to enlist the interests and energies of children in school work. In 1969, as though nothing changed in fifty-six years, William Glasser wrote "Schools Without Failure," in which he contends that the major problems in schooling are boredom, uninvolvement, and irrelevance, and that too many students, including the successful ones who are not necessarily engaged, think that their education has little relationship and value to their lives. In "Quality School", Glasser (1990) held that most students, including successful ones, would admit that they hate school, find it boring, put forth a low level of effort and commitment, and that among the ones who are successful in school, many (over 85%) do not work hard or do quality work. Glasser (1990) maintains that a quality classroom satisfies five student needs essential for engagement: safety, love (caring), fun, freedom (trust), and power (choice). He adds that dissatisfaction with school leads to resistance and disciplinary problems. "Disruptive behaviors in the classroom distract student and teacher attention from academic activity and create climates that are detrimental to

learning . . . When teachers are able to minimize disruptive behavior, time on task and active engagement increase, resulting in greater student achievement" (Shaughnessy et al., 1997).

More recently, Steinberg (1996) reports that a high percentage of students, approximately 40%, appear to be alienated, disconnected, or disengaged from school. The signs of student disengagement include absenteeism, apathy, low-level participation and achievement, misconduct, delinquency (Natriello & Scott, 1981); lower grades, less effort, less involvement in extracurricular activities, more mind-wandering in class (Steinberg, 1990); and cutting class, cheating, copying homework, drug and alcohol use, depression, and sexual precocity (Steinberg, 1996). Educators see the signs of disengaged students in the rise of school violence and the fall of national achievement test scores and respond with prescriptions for character and values education, social and emotional learning, and strategies for increasing student motivation to learn (Lickona, 1991; Elias et al., 1997; Raffini, 1993). Educational institutions have been accused of "dummying down" curriculum and standardized tests to accommodate the disengaged (Sykes, 1995). State mandated achievement tests seem to be designed for disengaged students because they require the instruction of low quality, fragmented bits of information (McNeil, 1986). The work of Theodore Sizer and the platform of the Coalition of Essential Schools emphasizes that students learn by doing, not by being told, and for students to learn well, they must be engaged (Muncy & McQuillan, 1996).

Mosher and MacGowen (1985) review earlier relevant studies that identify independent variables or characteristics that predispose a student toward related issues of

disengagement, specifically alienation, dropping out, and poor achievement. Their review shows that these variables are either school, student, or environmental characteristics: Students have a greater risk of dropping out of school when students have low ability combined with low self-confidence in academic ability, locus of control or self-efficacy, and low educational and occupational aspirations (Rumberger, 1983); Students' self-concept of one's academic ability is significantly related to standardized achievement test data, grade point average, and total absences from school; poor self-concept is associated with disengagement (Schneider et al., 1979); Disengagement is more likely to occur when students do not see themselves as capable students (Sirotnick, 1979); Engagement is increased when ample opportunities for student leadership and decision making are available (Rutter, 1979); Indicators of alienation and feelings of despair and separation include apathy, violence or vandalism, extensive absenteeism, careless school work, and a refusal to participate in school activities and may be attributed to the structure of secondary schools; most students drift through school, not really understanding the point of the curriculum, not grasping concepts in courses, and not having the requisites to succeed in extracurricular activities (Sprinthall & Collins, 1984).

In an effort to study student disengagement, an educator would be remiss if factors outside of school were ignored. To reiterate, parental values on the purpose of schooling influences and predisposes students' commitment to school (Claus, 1984). Parents' expectations of their child's success in school consistently has the strongest relationship with achievement (Thorkildsen & Stein, 1998). Students are likely to disengage from school when students are raised by authoritarian, permissive, or neglectful parents

(Steinberg et al., 1992); when students work more than 15 hours a week at a part-time job (Steinberg & Dornbush, 1990); and when peer groups do not value school work (Brown et al., 1991).

The causes of student disengagement from school are rooted in society, the family, the student, and in the school and the classroom (Mosher & Gowen, 1985). Factors outside the school may be beyond the school's ability to control, but factors within the school can be modified (McNeil, 1986). Phenomena within classrooms, and the climate they create, may have a detrimental effect on engagement, student behavior, attendance, teaching, and learning (Sedlack, 1986). Lufler, 1978, attributes disruptive behavior to poor quality teaching practices, and Unruh, 1977, attributes poor classroom discipline to teachers' lack of subject-matter knowledge, instructional objectives, poor planning, failure to involve students in goal-setting, and poor relationships with students. Students who report inconsistency, unpredictability, or unfairness in teachers' evaluations of their academic performance or social behavior also report that they are more likely to be absent from school, put forth low effort, settle for a low grade, and cheat on a test (Natriello, 1984). The quality of student-teacher relationships and the teacher's commitment to improve students' academic performance contributes to student success (Phi Delta Kappa, 1980).

More recent research studies have found that students are likely to disengage from school when punishments and rewards are used to control students (Kohn, 1996); and when the teacher controls information and learning (Glasser, 1992). Despite waves of attempted reforms toward student-centered practices, the lecture and note-taking method

is still the norm within most high schools (Weber, 1995). Lunenburg and Schmidt (1989) found that custodial classrooms characterized by dominance and subordination, mistrust, order, conformity, and the use of threats and punitive sanctions have harmful effects on students' satisfaction with school, their commitment to class work, and their reactions to teachers, while humanistic classrooms marked by acceptance, understanding, trust, flexibility, and attempts to encourage self-discipline among students likely result in positive attitudes. (To measure the extent to which pupil control by educators is custodial or humanistic, see "The Pupil Control Ideology Form" in Willower et al., 1973.)

In keeping with the district's mission to educate all students, it is incumbent upon its educators to identify and improve the effects that the classroom environment has on its students, especially if those effects contribute to disengagement. Sometimes teachers are unaware of how their classroom practices are perceived and experienced by their students (McCombs, 1997). Research indicates that students are likely to disengage from school when instructional methods fail to accommodate to students' individual learning processes (Johnston, 1996). "The odds in the classroom increase when teachers and students understand how people differ in their approaches to learning tasks - and then use that understanding to create strategies for learning (Johnston, 1998). Gardner (1995) supports this view: "Children do not learn in the same way . . . education works most effectively if personalized to individual differences, and if personal strengths are taken into account rather than ignored . . . any uniform educational approach is likely to serve a minority of children." As disengagement persists at alarmingly high levels, attending to students' individual learning styles is one way to expand teaching methods and curricula to reach

more students (O'Neill, 1990). Since it is student rather than teacher perceptions of instructional and management practices that predict student motivation and achievement (McCombs & Stiller, 1995; Mc Combs, 1996), attending to negative perceptions may change them and bolster student motivation and achievement (McCombs, 1997).

The literature is clear on the causes of student disengagement from school. Until educational reform efforts are successful in rooting out the causes, educators will continue to grapple with the disengaged . . . in a reactive way . . . with interventions serving as prescriptions to cure the condition. This intern believes that intervention would be best served if used in a proactive way to thwart the development of disengagement from school and prevent inevitable disaffected behaviors. To do that, an educator must first be able to identify the disengaged before they show signs or symptoms . . . before they fail or find their way down to the disciplinarian's office.

## Chapter 3 Design of the Study

### General Research Design

A three part Quality of School Life survey instrument comprising of the Quality of School Life Scale (Epstein & McPartland,1976), and a supplemental survey of 35 research-based items, prepared by this intern, was administered to all tenth grade students (N=420), enrolled at Cherry Hill High School East for the 1998-99 school year, in mid-November, during their English period, by their English teachers. Absentees were administered the survey when they returned to school. Those who failed to answer all the items in Part 1 were given an opportunity to answer the missing items so that they would not be eliminated from the study.

Events, such as a death in the family or divorce, could affect responses toward satisfaction and engagement with school, especially if a student dealt with it during the study period (Kimmel & Weiner, 1995). However, for the most part, maturation and history should not be threats to internal validity since all students have the same chance of being affected. At the time the survey was administered, there were no students on long-term suspension or in residential rehabilitation. There were several students who moved out of district or transferred to private schools. From the information available to this intern, none of these students were disaffected. At the time, there were no drop outs.

Research Instruments

The literature did not provide a comprehensive instrument specifically designed to measure the level of disengagement or engagement among a sample of students - one that would take into consideration all of the student, school, and environmental variables cited in the literature. However, Mosher and MacGowen (1985) recognize The Quality of School Life Scale (Epstein & McPartland, 1976), designed to measure student attitudes toward school, as a valid and reliable instrument to gauge student disengagement. Mok and Mc Donald (1994) found the QSL to be an appropriate scale to measure students' school experiences at the personal level.

The Quality of School Life Scale (QSL) is a standardized 27 item forced-choice, multidimensional measure of three basic aspects (subscales) of the quality of a student's life in school. The Satisfaction with School subscale, SAT (including items Q3, Q7, Q11, Q19, Q24), measures students' general satisfaction and reaction to school; the Commitment to Classwork subscale, COM (including items Q1, Q5, Q9, Q13, Q15, Q17, Q20, Q22, Q23, Q25, Q27), measures the level of students' commitment to and interest in school work and educational opportunities; and the Reactions to Teachers subscale, TCH (including items Q2, Q4, Q6, Q8, Q10, Q12, Q14, Q16, Q18, Q21, Q26), measures students' attitudes toward their teachers, the nature of student-teacher relationships, and students' evaluations of instructional interactions with teachers (Epstein & McPartland, 1976). The subscales were developed upon the following premises: Students who are positive in their evaluations of the hours they spend in school are more likely to behave in socially acceptable ways; students who find class assignments interesting and important

may learn more completely and develop positive attitudes toward learning; student-teacher relationships may be the key to student acceptance of educational goals, understanding of school procedures, development of independent behavior, and positive attitudes toward authority in and out of school (Epstein & McPartland, 1978). A copy of the original Quality of School Life Scale is found in Appendix C.

The QSL has been validated for elementary, middle, and high school students. The scale is concurrently valid to other measures collected from students, teachers, and school records and constructively valid to perceptions and behaviors associated with school experience (Epstein & Mc Partland, 1976). Epstein (1981) cites that several studies find an association between positive quality of school life and high student achievement in elementary and secondary schools. Items in the original QSL scale use positive and negative statements and several response patterns to minimize response set (Sabo, 1995). Responses to the questionnaire are scored to yield measures on each of the three subscales. The sum of the scores represents a global measure of the quality of school life (Lunenburg & Schmidt, 1989). The overall Kuder-Richard reliability is estimated at .87 (Sabo, 1995). One should keep in mind that scores obtained in the fall are generally higher than those obtained in the spring (Epstein, 1981).

The standard error of measurement, a measure of the discrepancies between obtained scores and true scores, for the QSL scale, was addressed by Epstein and McPartland (1978). They found that the scale had a relatively low standard error of measurement, suggesting that the scores could be used with confidence. The validity of self-report instruments is often questioned. "Students might not put down their true

position; they may put down the socially acceptable one" (O'Neill, 1990, quoting A. Gregore). However, "research has found that most students do not fake opinions if they have been given no incentives for dishonesty . . . when students understand that their opinions are important but unrelated to their own rewards and punishments in school, most students provide honest answers (Epstein & McPartland, 1978)."

In studying disengagement, most researchers have used multiple indices in questionnaires and surveys, and validated their findings through interviews and observations. Studies involved research teams, university and grant support, and took years to accomplish. Steinberg (1996) reports the findings of what he claims to be the most extensive study ever conducted on student disengagement. The surveying and interviewing of more than 20,000 students and their families took two years of planning and pilot-testing, four years of data collection in the field, and four years of data analysis. Each of Dr. Steinberg's questionnaires ranged between 10 and 16 pages and contained hundreds of individual items. Considering the nature and relative importance of a local field research project, the QSL scale serves as a highly appropriate instrument with which to begin. Items from Dr. Steinberg's scale were included in this study's survey instrument to check the validity of the QSL, which was designed generations ago, to measure disengagement in school, today. One may note that the items on both scales are quite similar. Other similar items, from a third research instrument, the Student Opinion Inventory (NSSE, 1974), were included in this study's survey instrument, also for establishing external reliability. A copy of the Student Opinion Inventory survey is located in Appendix D.

To ease the administration, scoring, ranking, and interpretation of the scores, this intern acquired permission from the developer and distributer of the QSL to reproduce the QSL (as long as the developers' names appeared on the front cover) and to reformat the true-and false questions to the format of the multiple choice questions, yet maintain the integrity of the instrument (J. L. Epstein, personal communication, June 29, 1998).

Although each of the 27 items in the QSL scale solicits information on variables that have been shown in the research to indicate disengagement, its scope is limited. The items do not solicit information on possible variables that research has shown contributes toward disengagement from school: students' perceptions of their teachers' grading and evaluation systems; students' involvement and management of part-time employment; teachers' instructional and disciplinary styles; students' perceptions of their parents' expectations, parenting style, and involvement in school; and peer influence on student effort and achievement, to cite a few.

While other researchers have added items measuring unique aspects of their particular setting while maintaining the reliable and valid integrity of the instrument (Darom & Rich, 1983), it is beyond the scope of this study to modify the QSL scale by adding items to measure relevant variables not covered in the original scale. Therefore, Part 2 of the survey, constructed to obtain comprehensive demographic data on stratifying variables such as, ethnic background, socioeconomic level, age, gender, grades (correlations between students' own reports of their grades and their actual grades are overall remarkably high, Steinberg, 1996), academic levels (honors, advanced, regular, modified), family structure (intact, divorced, remarried, foster, other), part-time

employment and chores, parental discipline and expectations, participation in family decisions, attendance history with the school district, teacher fairness in grading, learning potential, thoughts of dropping out of school, friends' value on school work, classroom climate, teachers' expectations, effort into school work and homework, quality of school work, understanding school work, satisfaction with teachers' instructional methods, teachers' concern about learning, quantity of learning, and level of participation in school activities . . . to look for relationships that could give educators areas for attention or improvement. These causal relationships were discussed with administrators in the intern's school. However, it was beyond the scope of this study to address causal relationships in this thesis. The supplemental items were added primarily to acquire data to test for internal and external reliability of the responses on the QSL scale.

Description of the Sample and Sampling Technique

All students in the sophomore class served as subjects for this study. All students were scored in QSL Scale (Part 1), in the research-based supplemental survey ( Part 2), and profiled for evidence of traditional indicators of disengagement.

Data Collection Approach

Directions for administering the scale are provided in the Quality of School Life Administration and Technical Manual (Epstein & McPartland, 1978) and were followed exactly. The sophomore English teachers attended a meeting to review the administration procedures. During this orientation, the teachers were reminded that the way a survey is presented can impact students' responses, just as the way a survey item is constructed can solicit a desired response (demand characteristics response). This could be a confounding

variable, if not controlled. Other issues that were discussed during the training included how to handle and minimize the effects of the following intervening variables: students not willing to cooperate (non-response); students who may not take this kind of survey seriously; students for whom the instrument is designed to identify may try to sabotage the effort; students with negative attitudes toward school may respond in careless ways rather than invest the time and effort to consider fine distinctions among questionnaire items; misunderstanding of questions and directions could cause inconsistency; and that students, to be socially correct, may "tell us what we want to hear" (modified halo effect). The teachers had an opportunity to review the survey, ask questions, and field anticipated problems with the document and its administration. This intern is confident that this process produced a standardized, yet flexible student orientation guideline for the administration of the survey and that it maximized both student and staff engagement in the survey.

During the months following the administration of the survey, this intern and her field mentor laboriously and carefully entered the raw, individual responses to all items in Part 1 and Part 2 into an Excel database. Under the guidance of the Director of Institutional Research, at Rowan University, this intern transferred the raw data into a comprehensive statistical software system entitled, "Statistical Package for the Social Sciences," commonly referred to as "SPSS" (version 8.0), designed to handle all steps in both simple and complex statistical analyses. Three students left more than one item in part 1 unanswered. They were asked to complete the items so that they would not be eliminated from the study. There were 11 students who left 1 item unanswered. Values

for these unanswered items were imputed by calculating the most frequent response the student gave to items 1 through 27, after the item responses were recoded for consistency in value. The documentation for the imputed values is located in Appendix E.

In mid-March, four months after the administration of the survey, this intern and her field mentor compiled the data on the traditional indicators of disengagement for each student from first and second marking period report cards, and cumulative attendance and disciplinary cards. The method of recording the data was kept consistent to avoid error. The intern reviewed, interpreted, and recorded all the report card data. The field mentor, who is the Vice Principal in charge of the sophomore class, reviewed, interpreted, and called out all of the attendance and disciplinary data for the intern to record. The data was recorded directly into an Excel data base file to facilitate data transfer into the same SPSS file containing the survey data. A copy of the Excel file that contains the data on the traditional indicators is located in Appendix F.

Data Analysis Plan

The data analysis plan has 6 steps.

Step 1

Step 1 attempted to establish confidence in the data, and provide information that is relevant to an administrator in understanding disengagement from school within this sample of students. The following analyses were performed on the whole group (N=420):

a. The distributions and histograms of the QSL scores, means and standard deviations.

b. Bar graphs depicting the frequencies of responses to each item in the survey. (These were not included in an appendix because of the volume of paper they required.)

c. Case summaries on each student by student identification number, in ascending order of their QSL score, specifying their individual subscale scores. Note that there is space to write in students' names to facilitate data collection (Appendix K).

Step 2

Step 2 addressed the internal reliability of the responses to the QSL. It was expected that there would be a significant correlation between the QSL, its subscales, and the 27 items comprising the scale and the subscales. A correlation coefficient measures the strength of a linear relationship between two quantitative variables. The values of the coefficients range from -1 (a perfect negative or inverse relationship) to +1 (perfect positive or parallel relationship) with 0 representing no relationship. These correlations were used to check for internal reliability of responses, that is whether students reported consistent opinions on related items.

The QSL score for each student was obtained by adding the number of points received on each of the 27 items in Part 1 of the survey. Each item contributing to the QSL score, was worth 1-5 points with 1 being a clearly negative evaluation and 5 being the most positive. Therefore, the lowest score possible was 27, the highest was 135. Scores were ranked in ascending order from the lowest score to the highest, by corresponding student identification number.

Before the QSL scores were calculated, the answer choices on the items that were reversed to minimize response set were recoded. Recoding ensured that the appropriate number of points were awarded for each response. The responses of 14 questions of the QSL scale were recoded with new values. Then the 27 items were combined to formulate

the QSL score. The items recoded with values (1=5)(2=4)(3=3)(4=2)(5=1) were: Q2, Q7, Q8, Q11, Q12, Q15, Q16, Q18, Q19, Q21, Q23, Q24, Q26. A copy of the syntax, showing the recoded items, is located in Appendix G.

For QSL responses, 1's are most negative, and 5's are most positive. Thus, a lower total of points, or low QSL score, implies greater disengagement, and a higher total of points, or high QSL score implies greater engagement.

Step 3

Step 3 tested for construct validity. A construct is an attribute that explains some phenomenon (Wiersma, 1995). The following are some potentially confounding variables that may account for differences in QSL scores. It is important to show that the only attribute contributing to the QSL score is student disengagement or engagement in school. To establish confidence in the data, and to support generalizability of the results, analyses were performed to show that other variables had no significant relationship to the QSL scores.

a. The period in which the survey was given; the teacher by whom the survey was administered.

b. Different academic levels of English classes (Modified, Regular, Accelerated, and Honors)

c. Students' self-report of his or her own overall academic level (Q30),

d. Gender (Q28),

e. Race, between Caucasians and all others groups combined, (Q29), and

f. Schooling history (Q36),

to show that disengagement, among students in this sample, is not a phenomenon particular to ability and demographics.

Step 4

To establish validity of the QSL scores as a measure of disengagement from school, this intern compared criterion-related evidence, external to the QSL scale, to the QSL scores. If the scores of the measure being validated (in this case the QSL scale) relate highly to the criterion, the measure is valid (Wiersma, 1995). This was done in three ways:

a. Variables, identified in the literature as contributing factors toward disengagement, were correlated with the QSL scores (and subscales), to check for significant relationships.

b. A selection of items, taken from the Student Opinion Inventory, that appear to have face validity to the QSL and measure similar dimensions of disengagement (specifically satisfaction with and participation in school) were correlated to the QSL scores and its subscales.

c. A selection of items taken from the short-version disengagement survey (Steinberg, 1996), that also appeared to have face validity, were correlated to the QSL scores and subscales. It is expected that the causal literature variables, the SOI items, and the Steinberg items will correlate significantly to the QSL and subscale scores.

The literature variables include items on: parents' discipline style (Q32), students' participation in family decisions (Q34), part-time employment more than 15 hours a week (Q35), teachers' fairness in grading (Q40), economic conditions at home (Q49), friends'

value on school work (Q51), classroom climate (Q52), teachers' level of expectations (Q54), and students' satisfaction with teaching methods (Q57). These variables asked students to report the degree to which they are affected by in and out of school variables identified in the literature to be associated with student disengagement from school. Items that were not answered in this section of the survey were left blank. No answers were imputed. To discriminate more clearly on the presence or absence of these literature variables, the 5 point format of these items was modified to either a 3 point or 2 point format . . . more of a "yes (5), no (1), somewhat (3)" format:

Q #32: (1=1)(2=5)(3=5)(4=1)(5=1): parents having authoritative/mixture style being ideal.

Q #34: (1=1)(2=1)(3=3)(4=5)(5=5): high level of participation in family decisions being ideal.

Q #35: (1=1)(2=1)(3=5)(4=5)(5=5)(6=5): students work a part-time job less than 15 hours a week being ideal.

Q #40: (1=1)(2=1)(3=3)(4=5)(5=5): having all teachers who grade fairly being ideal.

Q #46 (1=5)(2=5)(3=1)(4=1)(5=1): parents' value on education identified as very important being ideal.

Q #49: (1=1) (2=1)(3=5) (4=5)(5=5): average to high socio-economic conditions being ideal.

Q #51: (1=5)(2=5)(3=1)(4=1)(5=1): friends' value on education as very important being ideal.

Q #52: (1=1)(2=1)(3=3)(4=5)(5=5): supportive classroom environment being the ideal.

Q #54: (1=5)(2=3)(3=1)(4=1)(5=1): teachers expect excellent work being the ideal.

Q #57: (1=1)(2=1)(3=3)(4=5)(5=5): satisfied with methods in all classes being the ideal Note that item Q53, which was intended to be included with these other literature variables was dropped after a recoding error permanently corrupted the data on this item.

The items taken from the SOI survey include: participation in school activities (Q43), satisfaction with school activities (Q44), school spirit (Q45), satisfaction with reaching learning potential (Q48), satisfaction with teaching methods (Q57), number of classes in which learning a lot (Q59), satisfaction with counselor (Q61), and satisfaction with administration (Q62). Item Q57 was recoded for more discriminative responses for it was one of the literature variables.

The items from the Steinberg survey include: the level of effort in school (Q41), teachers' level of expectations (Q54), amount of homework done (Q55), understanding schoolwork (Q56), teachers caring about learning (Q58), and learning overall (Q60). Correlations were run between these items and QSL score (N=420) to check for external validity of the QSL scores in measuring disengagement. Of these items, only the responses to Q54 were recoded to the yes (5) - no (1) - somewhat (3) format for it, too, was used as a literature variable.

Other checks on internal reliability, to see if the students answered honestly and took the survey seriously, were made on the following pairs of items: number of classes in which learning a lot (Q59) and learning overall (Q60); teachers caring about learning (Q58) and classwork as a waste of time (Q25); and satisfaction with teaching methods (Q57) and wanting the same teachers next year (Q2). Correlations of these pairs were moderate to high (. 707, .272, .345 respectively) at the .000 level, indicating consistent

responses throughout the survey. Documentation for these correlations are located in Appendix H.

Items Q30 (academic level), Q31 (grades), Q37 (disciplinary record), Q38 (classroom behavior), and Q39 (on behavior toward other students) were used to test internal reliability, also. The veracity of the responses to these items, for specific students, were spot-checked in school records. No discrepancies were noted.

Item Q39 was judged to be a poorly constructed item and dropped.

When examining the data in all steps of the analysis plan, be sure to use the copy of the recoded survey included in Appendix I.

Step 5

Step 5 sets out to support that there is a significant correlation between QSL score and the composite score of traditional indicators of disengagement.

To begin, a decision was made on how to form low and high scoring groups for comparison. There were several ways to group the subjects according to QSL score. One way was to calculate the mean (82.5) and standard deviation (15.4), and demarcate at +/- 1 standard deviations from the mean. With this method, 78 students scoring from 37 to 67 would be in low group 1; 273 students scoring from 68 to 97 would be in middle group 2; and 69 students scoring from 98 to 122 would be in high group 3.

Another way was to use the traditional grading system to identify students who, out of a possible 135 points, "got an A" (>89% or 96, N=78), "got a B" (>79% or 85 and <90% or 97, N=115), "got a C" (>69% or 75 and < 80% or 86, N=94), "got a D" (>59% or 64 and <70% or 76, N=75), and "got an E" (<60% or 65, N= 58). Using this method,

there were several ways to define low and high groups.

A third way was to calculate and use quartiles. Students within the bottom 25%, scoring 72 or less would fall into low group 1 (N=110). Students scoring 73 to 92 would fall into a middle group (N=197). Students within the top 75%, scoring 93 or higher would fall into high group 3 (N=113). The later method was chosen over the others to allow for a greater number of subjects in the groups and to avoid using smaller groups at opposite ends of a rank order that would more likely contain significantly different students.

The traditional indicators include information from the following school records: report card grades from the first and second marking periods (gr1 and gr2); report card marks on class effort (effort) and conduct (conduct); absence (absence) from school (excused and unexcused); lates to school (ltsch); teacher disciplinary reports of chronic lateness to class (ltclrep); cuts (cuts); assigned detentions (det); and suspensions (suspen). Points were assigned to each variable so that a composite score (compscor) for the traditional indicators could be calculated for data analysis. The values for compscor had to be computed as (value +1) since many students had values of zero for many of the variables. The computed values were then added together to give each student a compscor. The compscor is the sum of (individual variable points +1) assigned in the following manner:

1. For poor grades received on both the first and second report cards (Gr1; Gr2):

one point for every grade of 60-69,

two points for every grade of 50-59,

three points for every grade of 40-49,

four points for every grade of 30-39,

five points for every grade of 20-29,

six points for every grade of 10-19,

seven points for every grade of 0-9,

one point for every "2" under the "Effort" heading, and

one point for every "2" under the "Conduct" heading.

(On report cards, students receive a "1" for satisfactory effort or conduct, or receive a "2" if effort or conduct is "of concern" to the teacher. Only the "2"s were counted.)

2. One point for every day absent (AB) from school,
3. One point for every day late to school (LTS),
4. One point for every disciplinary report submitted by a teacher for chronic lateness to class (RLTC),
5. One point for every reported cut,
6. One point for every assigned detention, including Saturday School detention,
7. One point for every suspension, including Saturday School suspension.

Step 6

Step 6 tested the strength of the primary hypothesis . . . that the QSL can be used in the early part of a school year to identify students who are at-risk for disengagement from school by accurately predicting future traditional measures of disengagement from school. This was done through a discriminant analysis.

## Chapter 4 Presentation of the Research Findings

### Step 1 findings

Four hundred and twenty 10th grade students took the QSL survey. The scores on the QSL scale ranged from 37 to 122, with a mean of 82.5 and a standard deviation of 15.4. The lowest score possible was 27, the highest 135. The frequencies of the scores of the QSL and its 3 subscales are located in Appendix J. In the same appendix, one can find histograms with superimposed bell curves to further appreciate the range of scores. The histograms indicate that of the 3 subscales, TCH (satisfaction with teachers) received the most positive responses. This indicated that for this sophomore class, the students, as a whole, were more satisfied with the relationships with their teachers, than they were satisfied and committed to their classwork, or satisfied with school overall. Appendix K includes a summary of each student's QSL and subscale scores, identifying which students (by student identification number) fell into low (scoring) QSL group 1 and which in high QSL group 2. The summary form was used to identify and record the names of each student to facilitate data collection.

### Step 2 findings

There was a highly significant correlation between the (total) QSL score and the scores of each of the three subscales, at the .001 level (.881, .931, .873 respectively). The commitment to classwork subscale correlated most highly with total QSL score. The items within each of the subscales significantly correlated to the total scores of the subscales and

to the other items within the subscale, also at the .001 level. Supporting documentation is located in Appendix L. The strength of the correlations, especially between individual items within each subscale indicated that the responses to the first 27 items of the survey were significantly reliable.

In the same appendix, one finds documentation on a T-test supporting that there was a statistically significant difference between the means of low QSL group 1 and high QSL group 3, on QSL score and each of the subscales, at the .001 level.

Step 3 findings

a. There were no significant differences (at the .001 level) between the mean QSL scores and subscale scores (N=420) when the students were compared by groups according to the teacher who administered the survey, or by groups according to the period in which they took the survey. The Anovas indicated that these variables had no confounding effect. Documentation is located in Appendix M.

b. Correlations and differences in means between scores and academic level of the English class (Honors N=90, Accelerated N=218, Regular N=83, Modified N=26, English as a Second Language N=3), in which the students took the survey, were examined as well. The correlation was not strong or highly significant (-.100 at .04), nor were the differences in mean QSL score between the groups (sig. at .056) indicating that disengagement among this sample is not a phenomenon of their academic ability in the subject of English. There was no significant difference based on level of English class between low (QSL) group 1 and high (QSL) group 3 (Chi-Square test: sig. at .132). Documentation is located in Appendix N.

c. Also considered were the correlations between the scores and the responses to item Q30 which asked students to identify the academic level of most of their classes. This item forced a student to declare into which ability group he or she belongs. Again, there were no significant differences by academic level on the QSL scores or subscales among all students (nor among students in low group 1 or high group 3). Academic level of English class (a concrete variable) highly correlated to Q30, self report of overall academic ability level (a subjective variable), at the .726 level. This latter finding supports confidence in the students' self-reports on item Q30. Documentation of the correlations, means, and Chi-Squared test for these findings are provided in Appendix O.

d. N=211 for males; N=209 for females. There was no significant correlation to QSL score based on gender (.022 at .654), or difference between the mean QSL score of male students and that of female students (Q28, sig. at.657). Nor were there any significant correlations or differences of the means on the subscales, or composite score of traditional indicators, based on gender. There was no significant difference in membership to low QSL group 1 or high QSL group 3 based on gender. The subgroups contained an equal mix of males and females. Documentation for this section is located in Appendix P.

e. For this section, the sample (N=420), was recoded into group 1 for Caucasians (N=318) and group 2 (N=102) for all minorities. There were no significant relationships or differences between the means of the two groups on QSL score or the subscales based on race. Chi-Square test indicated that membership into low QSL group 1 or high QSL group 3 had no relationship to gender either. Documentation for this section is located in Appendix Q.

f. Item Q36 asked students to identify when they entered the Cherry Hill Public School District. This item was asked in light of evidence from school records supporting that most students, in past years, who engaged in violent behavior, entered the school district later in their school career (middle school or high school) rather than earlier (in elementary school). The question it raised was whether students who entered the district later are more disengaged from school than students who entered earlier. Of the students who responded (3 missing), 55.2% (N=232) reported to have always attended Cherry Hill Schools; 21.4% (N=90) entered midway through elementary school; 9.8% (N=41) reported entering in middle school; 8.8% (N=37) reported entering in 9th grade; and 4% (N=17) reported entering in 10th grade. There were no significant correlations to or differences in the means of QSL score or the subscales between these groups of students, based on when they entered the district. A Chi-Square on Q36 between low QSL group 1 and high QSL group 2 showed no significant difference based on when the students entered the district. What was interesting to note was that more students in low QSL group 1 (N=63) reported always attending district schools than students in high QSL group 3 (N=50), and more students in high (QSL) group 3 (N=34) entered the district in middle or high school than students in low (QSL) group 1(N=17). One would like to think that it would have been the other way around. Documentation for this finding is located in Appendix R.

Step 4 findings

a. With a "5" being the most favorable response, and a "1" being the least favorable response to conditions that researchers have identified to contribute toward

disengagement from school, the numerical responses to the literature variables were correlated with QSL score. The results were significant but not very impressive. They are presented here in order of the strength of correlation to QSL score:

Q#57: satisfaction with teaching methods (.566 at .000 sig.).

Q#52: supportive classroom environment (.451 at .000 sig.),

Q#40: having teachers who grade fairly (.363 at .000 sig.),

Q#51: high peer value on education (.263 at .000 sig.),

Q#54: teachers expect excellent work (.221 at .000 sig.),

Q#34: high level of participation in family decisions (.220 at .000 sig.),

Q#32: parents having authoritative/mixture style (.171 at .000 sig.),

Q#46: high parental value on education (.158 at .001 sig.),

Q#35: students work a part-time job less than 15 hours a week (.155 at .001 sig.), and

Q#49: low socio-economic conditions: (.121 at .014 sig.).

The first three variables, that correlated most strongly with QSL score, were ones that measured student perception on activities and conditions in the classroom. From the strength of these correlations, it appears that educators should be most interested in the effects that the classroom environments within their school are having on student disengagement. It is good news that the variables upon which the school has the least control, the bottom four, correlated the lowest with QSL score (disengagement).

Crosstabulations and Chi-Square analyses were done on the responses to these items to determine whether there was a significant difference in the way low QSL group 1 responded to the items compared to the way high QSL group 3 responded.

Q#57: satisfaction with teaching methods:

84.4% of students in low group 1 reported that they were dissatisfied with the teaching methods used in about half or more than half of their classes while 17.7% of students in high group 3 gave this response. The groups were significantly different at the .000 level.

Q#52: supportive classroom environment:

23.1% of students in low group 1 described most of their classes as having dominance, mistrust, conformity, threats and punishments while 2.7% of students in high group 3 gave this response. 85.7% of students in high group 3 reported most of their classes having acceptance, understanding, trust, flexibility, and encouragement while only 32.4% of students in low group 1 gave this response. The difference between the groups on this item was significant at the .000 level.

Q#40: having teachers who grade fairly:

43.7% of students in low group 1 reported about half or less than half of their teachers graded fairly while only 4.5% of students in high group 3 gave that response. This finding was significant at the .000 level.

Q#51: high peer value on education:

63.3% of students in low group 1 reported that their friends' value on school work was less than very important while only 31.3% of students in high group 3 gave this response. The difference was significant at the .000 level.

Q#54: teachers expect excellent work:

19.4% of students in low group 1 reported that their teachers expect little or no

work and effort from them while 3.6% of students in high group 3 gave this response. 32.4% of students in low group 1 reported that their teachers expect good or excellent work and effort from them while 45.5% of students in high group 3 gave this response. The difference between the groups on this item was significant to the .001 level.

Q#34: high level of participation in family decisions:

22.9% of low group 1 reported little or no participation in family decisions while 8.1% of students in high group 3 gave this response. 52.3% of students in group 1 reported a good or high level of participation, while 73% of students in group 3 gave this response. Group 1 and group 3 differed in their responses to this item at the .01 level.

Q#32: parents having authoritative/mixture style:

35.8% of students in low group 1 reported having authoritarian, permissive or neglectful parents while 18.8% of high group 3 gave these responses. 64.2% of low group 1 reported having authoritative parents (preferred for engagement in school), while 81.3% of group 3 gave that response. The groups were statistically significantly different in their responses to this item at the .01 level.

Q#46: high parental value on education:

8 students in low group 1 responded that their parents' value on education was less than very important while only 1 student in high group 3 gave this response. The remainder of the students in group 1 (92.7%) and group 3 (99.1%) reported that their parents value on their education was very important or their most important value. The difference between the groups on this item was fairly significant at the .05 level.

Q#35: students work a part-time job less than 15 hours a week:

13.8% of students in low group 1 reported working more than 15 hours a week at a part-time job while 3.6% of students in high group 3 gave this response. Difference between the groups was at the .01 level.

Q#49: low socio-economic conditions:

11.3% (N=12) of students in low group 1 reported low or poor economic conditions at home while 2.7% (N=3) of students in high group 3 gave the same response. Although the differences between the groups on this item were not statistically significant (.085), more students in high group 3 reported good or excellent economic conditions than in group 1.

In comparing the responses to these survey items, which were designed to identify the presence of characteristics that contribute toward disengagement from school, one finds that on 9 out of the 10 items, students who scored low on the QSL scale answered differently than students who scored high, and that the differences were significant. The students in low group 1 reported a greater presence of contributing factors on all variables than did the members in high group 3, indicating that, the QSL scores for the groups, as measures of student disengagement and student engagement respectively, can be assumed with confidence. Documentation on this step is contained in Appendix S.

To test this confidence on step further, statistical analyses were done on the responses to these items among the members of each group to see if there were any differences in the way members of the same group answered the items. It was anticipated that there would be no significant difference in responses within groups. The students in

low QSL group 1 were divided into two subgroups (labeled "outlyra"). Membership in subgroup 1 or subgroup 2 depended upon whether a student's composite score of traditional disengagement indicator points fell within the top quartile of the survey sample. Subgroup 1 included 71 students who accumulated less than 26 points and subgroup 2 included 38 students who accumulated more than 25 points. The responses to the 10 literature variables did not significantly differ between the subgroups to the .01 level. This indicated that among the low scorers, the QSL scale was able to identify students who, according to the literature were at-risk for disengagement from school, independent of whether or not they manifested traditional disengaged behaviors. Documentation is located in Appendix T.

The students in high QSL group 3 were divided into 2 subgroups also (labeled "outlyrb"). Students in subgroup 1 (N=15) had over 25 composite score points; students in subgroup 2 (N=97) had less than 26 points. Crosstabulation percentages on the responses between subgroups within high group 3 were not similar. The percentages for the most negative responses were generally higher for subgroup 1 students. One must note that the percentages may be deceiving due to the small number of students in subgroup 1 of high group 3. When comparing the responses between the two subgroups of high group 3, five out of the 10 items found significant differences to the .01 level and one item was significant to the .05 level. This indicated that students who scored high on the QSL scale and who displayed a high level of disengaged behaviors throughout the year, as a group, responded differently to the literature variables than did other high scores who did not display a high level of disengaged behaviors. This difference in the literature

variables may support the position that the students in the subgroup who acted disengaged yet scored surprisingly high on the QSL scales, may have been more disengaged from school than their QSL scores indicated. This finding also indicated that the school-related items of the QSL scale, alone, may not be perfect in its ability to flag all students who are at-risk for disengagement. The need to include some items on student and out-of-school variables in an engagement survey was indicated. Crosstabs and Chi Squares on "outlyrb" are located in Appendix U.

b. Pearson correlations between the QSL scores and responses to 8 items from the Student Opinion Inventory were conducted to test for external validity. The analysis found the following correlations to QSL score to be significant at the .000 level:

- participation in school sponsored activities (Q43) correlated at .250,
- student satisfaction with the types of activities offered (Q44) correlated at -.349,
- students' opinion of the level of school spirit in school (Q45) correlated at .287,
- students reaching their learning potential (Q48) correlated at -.391,
- student satisfaction with teaching methods (Q57) correlated at .566,
- the number of classes in which students are "learning a lot" correlated at .575,
- satisfaction with counselors and guidance department correlated at -.207,
- satisfaction with treatment from administration correlated at -.437.

There was a statistical significant difference (at the .000 level) between the responses to these items given by low QSL group 1 and those given by high QSL group 3, except for one item, Q61, which was significant to the .05 level. These figures support the QSL scale ability to identify students who are disengaged from school and that the

responses to the survey were reliable. Documentation on this step is found in Appendix V.

c. The selection of items taken from Dr. Steinberg's short-version disengagement survey also correlated to QSL score, at the .000 level:

- the level of effort students put into school (Q41) correlated at .338.
- the level of teachers' expectations for good work and effort (Q54) correlated at .221,
- the amount of homework students do (Q55) correlated at .436,
- how much students really understand schoolwork rather than just give the right answers (Q56) correlated at -.234,
- how many teachers care if students learn (Q58) correlated at .491, and
- how much students are learning in school overall (Q60) correlated at .568.

The differences in the responses to these 6 items were significantly different between low QSL group 1 and high QSL group 3 at the .001 level. These findings also support that the QSL measures disengagement from school and that the responses were reliable. Documentation for this section is located in Appendix W.

finding 5

The composite scores of the traditional indicators among the study's sample (N=420) correlated moderately with the QSL scores at -.290 and significantly at the .000 level . . . that is as the QSL scores went up, the total number of points a student had for poor grades, lack of effort, poor conduct, absences, lates to school, lates to class, cuts, detentions, and suspensions went down. Each individual traditional indicator correlated significantly to QSL score, although the strength of the individual correlations were not

highly impressive:

- poor first report card grades (-.261 at .000),
- poor second report card grades (-.263 at .000),
- combined "of concern" effort marks on report cards (-.310 at .000),
- combined "of concern" conduct marks on report cards (-.152 at .002),
- total absences from school (-.162 at .001),
- lates to school (-.196 at .000),
- disciplinary reports of excessive lates to class (-.144 at .003),
- total number of reported cuts from class (-.171 at .000),
- number of detentions assigned (-.229 at .000), and
- number of suspensions served (-.158 at .001).

The strength of the correlation between QSL score and "compscor" laid a foundation for the main hypothesis - that the QSL scale can be used with confidence to predict disengaged students who will eventually manifest traditional behavioral indicators of disengagement. However, the weakness of the individual correlations raised doubt on whether traditional behavioral indicators of disengagement could be used with confidence to identify students, within this sample, who were disengaged from school. With the validity of the QSL scale as a measure of disengagement firmly established, the findings suggest that the link between student disengagement and traditional behavioral indicators is not as strong as the literature, or "compscor" suggests.

To support the QSL as a predictive measure of disengagement, this intern anticipated a significant difference between groups 1 and 3 on "compscor," but no

difference on "compscor" within the groups (meaning between subgroups).

A T-test on the mean total points for all traditional indicators (compscor) for students in low QSL group 1 and students in high QSL group 3 showed a significant difference between the groups at the .000 level, indicating that the totality of traditional indicators can be used with confidence to identify the disengaged. However, when one looks at the differences of the means of the individual indicators, only a few were as distinct:

- Report card grades and effort marks - significant to the .000 level,
- Report card conduct marks - not significant (.059),
- Total absences from school - significant to .05 level,
- Lates to school - significant to the .01 level,
- Reports of excessive lates to class - significant to the .05 level,
- Total number of cuts - significant to the .05 level,
- Number of detentions - significant to the .01 level, and
- Number of suspensions - not significant (.116).

While entering the data on these behavioral indicators, it became apparent that there were students in low QSL group 1 ( the disengaged students) who had manifested few indicators and students in high QSL group 3 (the engaged students) who had manifested many indicators. If these behaviors were truly flags of disengagement, there should not have been obvious differences in traditional indicator points among the students with low QSL scores.

Using the 75% quartile again (compscor>25), this time to identify low and high

demarcation for compscor, two subgroups ("outlyra") emerged from low QSL group 1: subgroup 1 (N=71) who scored less than 26 points on "compscor" and subgroup 2 (N=39) who scored more than 25 points on "compscor." There was a significant difference (to the .000 level) between the means of "compscor" of each subgroup in low QSL group 1, as well as significant differences (to the .001 level) between the means of all the individual traditional indicators of the subgroups. The traditional behavioral indicators of student disengagement from school did not flag all of the students in this sample who scored low on the QSL scale. The results of a discriminant analysis to predict how a student would fare on the QSL scale, based on the points of traditional behavioral indicators he or she had, showed that traditional indicators had a 50% chance of accurately predicting membership into low QSL (disengaged) group 1. This is supported by the fact that of the 50 students who scored lowest on the QSL, only 24 students fell into the upper quartile range of traditional indicator points. This was congruent with the other findings of this section and indicated that the QSL scale was most likely a better measure of student disengagement from school than traditional behavioral indicators. Documentation for this step is located in Appendix X .

Finding 6

In light of evidence that validated the QSL scale as a measure of student disengagement and other evidence that indicated that absence, lates, cutting, and other inappropriate behaviors may not be reliable indicators of disengagement from school, it appeared fruitless to proceed with analysis to determine if the QSL could be used with confidence early in a school year to accurately predict future behavioral indicators of

disengagement. Still, administrators could benefit from having a tool that could predict said manifestations, whether they are in fact indicators of disengagement or not. Besides, one cannot conclude from a study on one sample, that the literature on behavioral indicators of disengagement is incorrect. Therefore, the intern proceeded with a discriminant analysis to test the ability of the 27 items on the QSL scale to predict the group of students who had accumulated the most traditional indicator points among the sample. The variable "composite score outlyer," or csoutlyr for short, was defined to include subgroup 1 (N=312) and subgroup 2 (N=107). Subgroup 1 included all students who had less than 26 indicator points, or less than 75% of the maximum frequency of points. Subgroup 2 included all students who had more than 25 indicator points, or more than 75% of the maximum frequency of points. (The traditional indicator points of 1 student who suffered from chronic illness all year were not tabulated. Therefore, 1 student was left ungrouped.) The responses to the 27 items on the QSL scale were able to predict student membership into subgroup 1, or subgroup 2, with 69% accuracy. Given that the QSL score is a measure of student disengagement, this finding also indicates a weakness in the link between traditional indicators and student disengagement from school. Documentation on this finding is in Appendix Y.

## Chapter 5 Conclusions, Implications, and Further Study

### Conclusions and Implications

Firmly believing that unwanted behaviors in school are signs of disengagement, the intern hoped to show that the QSL scale could be used as a crystal ball or as an early-warning test to predict which students would prove to be disengaged from school. However, the QSL scale only did a fair job (69% accuracy) in predicting student behavior traditionally associated with disengagement from school. The hypothesis that the scale does identify disengaged students was fully supported by the research and the study's findings. The the major finding from this study supports the "silent disengagement" hypothesis - that disengaged students are not always the ones who act out in school.

As the intern typed in the names of students, who had become frequent visitors to the grade level office, next to their identification number, she was confident that these students would be the ones to score low on the scale. With a click of the "sort" icon, the project took some unexpected turns. Yes, the scale correctly flagged the one student (10th from the bottom) who dropped out of school in December, and four other students who, by March, left school to go to alternative placements (24th, 29th, 33rd, and 40th from the bottom). However, among the low scorers, the bottom quartile (N=110), only 42 students could be identified as disengaged from school based on their frequent visits to the office or by their disciplinary and attendance records (traditional indicators). There were 68 silently disengaged students whose names came as a surprise to school

administrators, teachers, and parents. The statistical findings of this study suggest that educators need to widen their focus when looking for disengaged students. The squeaky wheels may not be the only ones who need the oil.

Now that a faster, and more reliable and valid method to identify disengaged students is available, a "wait and see approach" in providing educational services is no longer acceptable. This scale provides clients for Pupil Assistance Committees early in a school year. It is also clear, now, that providing assistance to students who act disengaged addresses only half the problem. Silent disengagement had been confirmed.

Knowing which students are at-risk for disengagement from school calls for the immediate development and implementation of individual intervention strategies to engage them into the mission of the school. At the very least, careful examination of student responses to the QSL scale, by subscale, can provide administrators with general direction for school improvement. Sharing the results of this survey with parents and teachers can generate self-reflection and change. To ignore the findings of this study, and not use this scale to advantage, is antithetical to "success for all."

Implications for Leadership Development

This project provided opportunities for the intern to develop and practice several leadership competencies for school administrators. The intern found a discrepancy between educational theory and practice and found a way to rectify the issue. This experience exercised skills in communications and group processes. The findings raised questions and stimulated discussions concerning the curriculum and teaching practices within the school, especially in relation to this new group of special needs students. The

intern learned how to conduct field research on a shoe-string budget and utilize current technology in research. The intern's most significant accomplishment was learning how to statistically prove a gut feeling - how to gather tangible data and manipulate it according to established standards, to yield reliable information for sound educational practice. Just as significant, the intern formed new friendships with educational professionals to whom she can turn for advise and assistance. Armed with new research, computer, and analysis skills, and new alliances, the intern feels confident that she can address any educational issue, professionally. These fruits of her labor, forever eliminate the need to put on self-imposed blinders.

Organizational Change

The intern and her field mentor are planning to recommend to the Superintendent and the Board of Education the use of QSL scale as part of an expanded orientation process for incoming freshman, designed to make the transition to high school for disengaged students a more positive and productive experience. Administrators, parents, teachers, and guidance counselors received a brief orientation on the design and purpose of the scale. Individuals have expressed that they have a new perspective on student behavior and a new approach to take when communicating with each other. The vice principal who directs the Pupil Assistance Committee, indicated that during the summer, when the PAC program is evaluated and revised, he will consider the scale as an additional assessment tool for the team to use next year. The principal acknowledged that the findings in this study support his decision to mandate that, starting next school year, 30% of all classroom assessments shall be alternative in design.

Need for Further Study

Additional samples of students should be surveyed and analyzed to test the generalizability of the results of this study. The students in this study were compared to themselves in terms of degree of satisfaction with school. Local norms need to be developed so that an educator could determine, with ease and confidence, the level to which a particular group of students are engaged in school - and whether that level is satisfactory. Lastly, a faster method of scoring the scale and entering data into a SPSS data base needs to be designed.

Epstein and McPartland (1976) contend that students may increase their QSL scores over time in innovative settings designed to upgrade the quality of school life. Over the years since then, much has been studied in the area of school reform and student engagement in school. It is beyond the scope of this study to suggest methods, practices, or programs that could improve the quality of school life for students. However, it must be said that identifying the disengaged is only the first step, not the goal, and that the responsibility that comes with identification is heavy. The next step is to identify the reasons why students are disengaged. From this intern's experiences in other projects, a good way to find out "why" is to ask . . . the disengaged know exactly "why." The steps taken to remove the obstacles preventing student engagement in school will be those one can say were taken to ensure "success for all."

In light of recent school violence throughout the nation, by students identified as outcasts within their school communities, interest in students' quality of school life takes on a new significance. The QSL scale was originally designed to address academic and

achievement issues. Unfortunately, disengaged students are no longer playing hooky from school . . . they are now planning mass killings and carrying through with those plans. The need for a way to identify potentially troubled youth has never been as urgent as it is now. This study blew the dust off of an instrument that could serve as a screening device for potentially disengaged students. The use of the Quality of School Life Scale can serve as a proactive step forward in the reform movement.

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# Appendix A

## The Quality of School Life Survey

Student Identification Number _____

Student's name _____ Room _____

Period _____

# QSL

## THE QUALITY OF SCHOOL LIFE SCALE

Joyce L. Epstein
James M. McPartland
The Johns Hopkins University

To the students:

The questions in this booklet will help you and others who seek to improve schools to understand how you feel about school and the things that happen in school. Read each question carefully. Then circle **one** answer that is closest to what you think. You do not have to circle the whole answer, just the number next to it. Remember, **this is not a test**. There are **no** right or wrong answers. Please work on your own. It is important to tell us what **you** really think. Please do not leave any blanks. If no answer is *exactly* what you think, choose the one that is *closest* to what you think.

Student Identification Number _____

# Part I: The Quality of School Life Scale

Read each statement then circle the one answer that tells best what **you** think.

1. **In class, I often count the minutes till it ends.**
    1. In all my classes
    2. In most of my classes
    3. In about half of my classes
    4. In one or two of my classes
    5. In none of my classes

2. **I wish I could have the same teachers next year.**
    1. All of them
    2. Most of them
    3. About half of them
    4. One or two of them
    5. None of them

3. **Most of the time I do not want to go to school.**
    1. I always feel this way
    2. I often feel this way
    3. I sometimes feel this way
    4. I seldom feel this way
    5. I never feel this way

4. **Most of my teachers want me to do things their way and not my own way.**
    1. I always feel this way
    2. I often feel this way
    3. I sometimes feel this way
    4. I seldom feel this way
    5. I never feel this way

5. **I hardly ever do anything very exciting in class.**
    1. I always feel this way
    2. I often feel this way
    3. I sometimes feel this way
    4. I seldom feel this way
    5. I never feel this way

Student Identification Number _____

6. **My teachers often act as if they are always right and I am wrong.**
    1. All my teachers act this way
    2. Most of my teachers act this way
    3. About half of my teachers act this way
    4. One or two of my teachers act this way
    5. None of my teachers act this way

7. **I am very happy when I am in school.**
    1. All the time
    2. Often
    3. Sometimes
    4. Seldom
    5. Never

8. **Most of my teachers really listen to what I have to say.**
    1. I always feel this way
    2. I often feel this way
    3. I sometimes feel this way
    4. I seldom feel this way
    5. I never feel this way

9. **I daydream a lot in class.**
    1. In all my classes
    2. In most of my classes
    3. In about half of my classes
    4. In one or two of my classes
    5. In none of my classes

10. **Certain students in my classes are favored by my teachers more than the rest.**
    1. This happens in all my classes
    2. This happens in most of my classes
    3. This happens in about half of my classes
    4. This happens in one or two of my classes
    5. This never happens in my classes

11. **I like school very much.**
    1. I always feel this way
    2. I often feel this way
    3. I sometimes feel this way
    4. I seldom feel this way
    5. I never feel this way

Student Identification Number _____

**12. Teachers here have a way with students that makes me like them.**

1. I always feel this way
2. I often feel this way
3. I sometimes feel this way
4. I seldom feel this way
5. I never feel this way

**13. Most of the topics we study in class can't end soon enough to suit me.**

1. I always feel this way
2. I often feel this way
3. I sometimes feel this way
4. I seldom feel this way
5. I never feel this way

**14. Most of my teachers do not like me to ask a lot of questions during a lesson.**

1. I always feel this way
2. I often feel this way
3. I sometimes feel this way
4. I seldom feel this way
5. I never feel this way

**15. This semester I am eager to get to . . .**

1. All my classes
2. Most of my classes
3. About half of my classes
4. One or two of my classes
5. None of my classes

**16. How would you rate the ability of most of <u>your</u> teachers compared to teachers in other schools at your grade level? My teachers are . . .**

1. Far above average
2. Above average
3. Average
4. Below average
5. Far below average

**17. In my classes I get so interested in an assignment or project that I don't want to stop work.**

1. This never happens
2. This hardly ever happens
3. This sometimes happens
4. This happens quite often
5. This happens every day

Student Identification Number _____

**18. Thinking of my teachers this semester, I really like . . .**

1. All of them
2. Most of them
3. Half of them
4. One or two of them
5. None of them

**19. The school and I are like . . .**

1. Good friends
2. Friends
3. Distant relatives
4. Strangers
5. Enemies

**20. The work I do in most classes is . . .**

1. Not at all important to me
2. Not too important to me
3. Somewhat important to me
4. Pretty important to me
5. Very important to me

**21. This semester my teachers and I are . . .**

1. On the same wave length
2. In the same country
3. On the same planet
4. Somewhere in the same solar system
5. In two different worlds

**22. The things I get to work on in most of my classes are . . .**

1. Great stuff - really interesting to me
2. Good stuff - pretty interesting to me
3. OK - school work is school work
4. Dull stuff - not very interesting to me
5. Trash - a total waste of time

**23. If you could choose to take any courses at all, how many of your <u>present</u> courses would you take?**

1. All of them
2. More than half of them
3. About half of them
4. Fewer than half of them
5. None of them

Student Identification Number _____

**24. I enjoy the work I do in class.**

1. Always
2. Often
3. Sometimes
4. Seldom
5. Never

**25. Work in class is just busy work and a waste of time.**

1. Always
2. Often
3. Sometimes
4. Seldom
5. Never

**26. I feel I can go to my teacher with the things that are on my mind.**

1. Always
2. Often
3. Sometimes
4. Seldom
5. Never

**27. School work is dull and boring for me.**

1. Always
2. Often
3. Sometimes
4. Seldom
5. Never

Please turn to the next page . . .

Student Identification Number _____

## Part II: Please tell us about you.

28. Circle: Male Female

29. Circle or fill-in the one that best describes you:
    1. African-American
    2. Asian
    3. Caucasian (White)
    4. Hispanic
    5. Native-American
    6. Pacific Islander
    7. Alaskan-Native
    8. Other _____
    9. Dual Heritage, but I identify with _____
    10. Indian

30. Circle the one that best describes you:
    1. I take mostly Honors classes
    2. I take mostly Advanced Placement classes
    3. I take mostly Accelerated classes
    4. I take mostly Regular classes
    5. I take mostly Modified classes

31. Circle the one that bests describes your grades on your final report card last school year:
    1. I got mostly A's and some B's
    2. I got mostly B's and some C's
    3. I got mostly C's and some D's
    4. I got mostly D's and some E's or F's
    5. I got mostly E's and F's

32. Circle the one that best describes your parents' discipline style:
    1. Authoritarian - bossy - too strict - unfair in expectations and demands - won't bend
    2. Authoritative - firm but fair - will listen to my point of view - flexible and reasonable
    3. A mixture of styles
    4. Permissive - cares but is very easy going - few rules if any - very open minded
    5. No discipline - doesn't care what I do - uninvolved with what I do

33. Circle the one that best describes your household:
    1. Two-parent/guardian family; one parent works outside the home
    2. Two-parent/guardian family; two parents work outside the home
    3. One-parent/guardian family; parent works inside or outside the home
    4. Foster care family; one guardian works outside the home
    5. Foster care family; two guardians work outside the home

Student Identification Number _____

34. Circle the one that best describes how much you participate in family decisions:
    1. High level of participation
    2. A good level of participation
    3. An average level of participation
    4. A low level of participation
    5. No participation

35. Circle the one that best describes your situation:
    1. I have a part-time job, I work more than 15 hours a week, and I have a lot of regular chores to do in my home.
    2. I have a part-time job, I work more than 15 hours a week, but I do not have a lot of regular chores to do in my home.
    3. I have a part-time job, I work less than 15 hours a week, and I have a lot of regular chores to do in my home.
    4. I have a part-time job, I work less than 15 hours a week, but I do not have a lot of regular chores to do in my home.
    5. I do not have a part-time job, but I do have a lot of regular chores.
    6. I do not have a part-time job and I do not have a lot of regular chores.

36. Circle the one that best describes your school history:
    1. I have always attended Cherry Hill schools.
    2. I entered the Cherry Hill school district midway through elementary school.
    3. I entered the Cherry Hill school district in middle school.
    4. I entered the Cherry Hill school district in 9th grade.
    5. I entered the Cherry Hill school district in 10th grade.

37. Circle the one that best describes your disciplinary record:
    1. I have and will most likely have a clean record.
    2. I hardly ever get in trouble.
    3. I sometimes get in trouble.
    4. I often get in trouble.
    5. I always get in trouble.

38. Circle the one that best describes your behavior in your classes:
    1. I never disrupt my classes.
    2. I seldom disrupt my classes.
    3. I sometimes disrupt my classes.
    4. I often disrupt my classes.
    5. I always disrupt my classes.

Student Identification Number _____

39. Circle the one that best describes your behavior towards other students:
    1. I always try to hurt others.
    2. I often try to hurt others.
    3. I sometimes try to hurt others.
    4. I seldom try to hurt others.
    5. I never try to hurt others.

40. Circle the one that best describes your teachers' grading systems:
    1. All of my teachers grade fairly.
    2. Most of my teachers grade fairly.
    3. About half of my teachers grade fairly.
    4. Only one or two of my teachers grade fairly.
    5. None of my teachers grade fairly.

41. Circle the one that best describes the level of effort you put into school:
    1. No effort
    2. I do what I need to pass.
    3. I do what I need to do to get good grades.
    4. I work hard.
    5. I do my very best.

42. Circle the one that best describes what **you** think about the quality of your school work:
    1. Highest quality
    2. Good quality
    3. Fair quality
    4. Poor quality
    5. No quality

43. Circle the one that best describes the level of your participation in school-sponsored activities:
    1. No participation
    2. Little participation
    3. Average participation
    4. High participation
    5. Highest participation

44. Circle the one that best describes your satisfaction with the types of student activities offered:
    1. Very satisfied
    2. Satisfied
    3. Neither satisfied nor dissatisfied
    4. Dissatisfied
    5. Very dissatisfied

Student Identification Number _____

45. Circle the one that best describes "school spirit" here at school:
    1. Very poor
    2. Poor
    3. Fair
    4. Good
    5. Excellent

46. Circle the one that best describes **your parents'** value on your education:
    1. Most important value
    2. Very important
    3. Somewhat important
    4. Little importance
    5. Couldn't care less

47. Circle the one that best describes **your** value on your education:
    1. My education is my most important value.
    2. My education is a very important value.
    3. Somewhat of an important value
    4. My education is of little importance to me.
    5. I couldn't care less about my education.

48. Circle the one that best describes your potential as a student:
    1. I am learning as much as I can.
    2. I am learning close to my potential.
    3. I am learning about half of what I could learn.
    4. I am learning a little compared to my potential.
    5. I am learning zero compared to my potential.

49. Circle the one that best describes the economic conditions of your home:
    1. Hard times
    2. Low
    3. Average
    4. Good
    5. Excellent

50. Circle the one that best describes the amount of times you think about dropping out of school:
    1. Never
    2. One or two times
    3. Sometimes
    4. Often
    5. All the time

Student Identification Number _____

51. Circle the one that best describes how your friends value school work:
    1. School work is their most important value.
    2. School work is very important to them.
    3. School work is somewhat important to them.
    4. School work is of little importance to them.
    5. My friends couldn't care less about school work.

52. Circle the one that best describes your classes, overall:
    1. Mostly dominance, mistrust, conformity , threats, and punishments
    2. A mix but closer to number 1.
    3. An equal mix of numbers 1 and 5
    4. A mix but closer to number 5
    5. Mostly acceptance, understanding, trust, flexibility, and encouragement

53. Circle the one that best describes your understanding of your parents' expectations of you:
    1. I don't know what my parents expect of me.
    2. My parents expect little from me.
    3. My parents expect an average amount from me.
    4. My parents expect a lot from me.
    5. My parents expect too much from me.

54. Circle the one that best describes your teachers' expectations of you, overall:
    1. My teachers expect excellent work and effort from me.
    2. My teachers expect good work and effort from me.
    3. My teachers expect average work and effort from me.
    4. My teachers expect little work and effort from me.
    5. My teachers expect no work or effort from me.

55. Circle the one that best describes how much of your homework you usually do:
    1. None of it
    2. A little of it
    3. Half of it
    4. Most of it
    5. All of it

56. Circle the one that best describes how much you really understand schoolwork, rather than just give the right answers:
    1. I always understand.
    2. I mostly understand.
    3. I understand half the time.
    4. I seldom understand.
    5. I never understand.

Student Identification Number _____

57. Circle the one that best describes how many classes in which you are satisfied with the methods used to teach the course material:
    1. All
    2. Most
    3. About half
    4. Few
    5. None

58. Circle the one that best describes how many of your teachers care if you learn:
    1. None
    2. Few
    3. About half
    4. Most
    5. All

59. Circle the one that best describes how many subjects in which you are "learning a lot" this year:
    1. In all my subjects
    2. In most of my subjects
    3. In about half of my subjects
    4. In one or two of my subjects
    5. In none of my subjects

60. Circle the one that best describes how much you are learning in school, overall:
    1. Nothing
    2. A little
    3. A fair amount
    4. A good amount
    5. A lot

61. Circle the one that best describes how satisfied or dissatisfied you are with the way you are treated by your counselor and the guidance department:
    1. Very satisfied
    2. Satisfied
    3. Neither satisfied nor dissatisfied
    4. Dissatisfied
    5. Very Dissatisfied

62. Circle the one that best describes how satisfied or dissatisfied you are with the way you are treated by the administration:
    1. Very satisfied
    2. Satisfied
    3. Neither satisfied nor dissatisfied
    4. Dissatisfied
    5. Very dissatisfied

Please turn to the next page . . .

Student Identification Number _____

**PART III: Now you may comment in your own words about the quality of life in school:**

Some students say: "Overall, I like school."
Others say: "Overall, I hate school."
How do you feel and why? Write as much or as little as you wish.

63. Overall, I _____school, and this is why:

(continue on back, if necessary)

Appendix B

Dr. Steinberg's Short Scale

**BE SURE TO:**

- **Use a No. 2 pencil only**
- **Make no stray marks on this form**
- **Fill in the circles completely**
- **Erase all changes cleanly**

**Starting in the left box, write your student identification number here. Then fill in the corresponding responses below it.**

| STUDENT I.D. NUMBER | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ |
| ① | ① | ① | ① | ① | ① | ① | ① | ① | ① |
| ② | ② | ② | ② | ② | ② | ② | ② | ② | ② |
| ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ |
| ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ |
| ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ |
| ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ |
| ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ |
| ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ |
| ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ |

1. **What is your birthdate?** → **Write in your birthdate. Then fill in the corresponding responses below it.**

| BIRTHDATE | | |
|---|---|---|
| MONTH | DAY | YEAR |
| | | |
| ○ Jan | ⓪ ⓪ | ○ 1966 |
| ○ Feb | ① ① | ○ 1967 |
| ○ March | ② ② | ○ 1968 |
| ○ April | ③ ③ | ○ 1969 |
| ○ May | ④ | ○ 1970 |
| ○ June | ⑤ | ○ 1971 |
| ○ July | ⑥ | ○ 1972 |
| ○ Aug | ⑦ | ○ 1973 |
| ○ Sept | ⑧ | ○ 1974 |
| ○ Oct | ⑨ | ○ 1975 |
| ○ Nov | | ○ 1976 |
| ○ Dec | | |

2. **What is your sex?**
   ○ Male ○ Female

3. **What grade are you in?**
   ○ 9th (freshman) ○ 11th (junior)
   ○ 10th (sophomore) ○ 12th (senior)

Short scale for engagement / disengagement

4. **How strongly do you agree or disagree with each of these statements?**

| | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| Success in life does not have much to do with the things studied in school. | ● | ○ | ○ | ○ |
| Even if I could get a very good job at present, I'd still choose to stay in school. | ○ | ○ | ○ | ○ |
| My teachers care about how I'm doing. | ○ | ○ | ○ | ○ |
| Teachers are willing to talk things over with me. | ○ | ○ | ○ | ○ |
| There is a teacher I could go to if I got into really bad trouble. | ○ | ○ | ○ | ○ |
| Most teachers like me. | ○ | ○ | ○ | ○ |
| The best way to get through most days at school is to goof off with my friends. | ○ | ○ | ○ | ○ |
| I'm losing interest in school because my teachers keep going over the same old thing. | ○ | ○ | ○ | ○ |
| Most of the teachers don't really expect very good work from me. | ○ | ○ | ○ | ○ |
| I care what most of my teachers think of me. | ○ | ○ | ○ | ○ |
| Most of my classes are boring. | ○ | ○ | ○ | ○ |
| I feel satisfied with school because I'm learning a lot. | ○ | ○ | ○ | ○ |

5. **When you try hard in school, which of the following reasons are most important for you? (ANSWER AS MANY AS APPLY TO YOU.)**
   - ○ My parents put pressure on me.
   - ○ I want to make my parents proud of me.
   - ○ I don't want to embarrass my family.
   - ○ My family is making sacrifices for my education.
   - ○ I want to learn the material.
   - ○ I need the grades to get into college.
   - ○ Graduating from high school will help me get a job.
   - ○ I want to keep up with my friends.
   - ○ My teachers expect me to do well.
   - ○ My teachers encourage me to work hard.
   - ○ I almost never try hard, so nothing applies.

6. **Compared to your friends, how much time do you put into your homework?**
   - ○ I put in more time on homework than my friends do.
   - ○ I put in less time.
   - ○ I put in about as much time as my friends.

**Now we're going to ask some questions about your courses. FOR ANY SUBJECT THAT YOU ARE NOT TAKING NOW, ANSWER FOR THE LAST CLASS YOU TOOK IN THAT SUBJECT.**

7. **In each of these classes, how often do you try as hard as you can? (Darken one choice for each class.)**

| | Almost every day | A few times per week | About once per week | Very rarely | Never | I have never taken this subject |
|---|---|---|---|---|---|---|
| Math | ○ | ○ | ○ | ○ | ○ | ○ |
| English | ○ | ○ | ○ | ○ | ○ | ○ |
| Social Studies | ○ | ○ | ○ | ○ | ○ | ○ |
| Science | ○ | ○ | ○ | ○ | ○ | ○ |
| Foreign Language | ○ | ○ | ○ | ○ | ○ | ○ |
| Art, Music, Drama | ○ | ○ | ○ | ○ | ○ | ○ |
| Vocational/Business | ○ | ○ | ○ | ○ | ○ | ○ |

8. **How often, in each of these classes, do you feel you are challenged to think hard? (Darken one choice for each class.)**

| | Almost every day | A few times per week | About once per week | Very rarely | Never | I have never taken this subject |
|---|---|---|---|---|---|---|
| Math | ○ | ○ | ○ | ○ | ○ | ○ |
| English | ○ | ○ | ○ | ○ | ○ | ○ |
| Social Studies | ○ | ○ | ○ | ○ | ○ | ○ |
| Science | ○ | ○ | ○ | ○ | ○ | ○ |
| Foreign Language | ○ | ○ | ○ | ○ | ○ | ○ |
| Art, Music, Drama | ○ | ○ | ○ | ○ | ○ | ○ |
| Vocational/Business | ○ | ○ | ○ | ○ | ○ | ○ |

9. **How often do you feel so confused about what's going on that you don't see any reason to try? (Darken one choice for each class.)**

| | Almost every day | A few times per week | About once per week | Very rarely | Never | I have never taken this subject |
|---|---|---|---|---|---|---|
| Math | O | O | O | O | O | O |
| English | O | O | O | O | O | O |
| Social Studies | O | O | O | O | O | O |
| Science | O | O | O | O | O | O |

10. **In each of these classes, how often do you find yourself concentrating so hard that time passes quickly? (Darken one choice for each class.)**

| | Almost every day | A few times per week | About once per week | Very rarely | Never | I have never taken this subject |
|---|---|---|---|---|---|---|
| Math | O | O | O | O | O | O |
| English | O | O | O | O | O | O |
| Social Studies | O | O | O | O | O | O |
| Science | O | O | O | O | O | O |

11. **How often are you asked to show that you REALLY UNDERSTAND the material, rather than just give the right answer? (Darken one choice for each class.)**

| | Almost every day | A few times per week | About once per week | Very rarely | Never | I have never taken this subject |
|---|---|---|---|---|---|---|
| Math | O | O | O | O | O | O |
| English | O | O | O | O | O | O |
| Social Studies | O | O | O | O | O | O |
| Science | O | O | O | O | O | O |

12. **When your teacher assigns homework, how much of the homework do you usually do? (Darken one choice for each class.)**

| | Homework is never assigned | None of it | Some of it | All of it | I do more than is required | I have never taken this subject |
|---|---|---|---|---|---|---|
| Math | O | O | O | O | O | O |
| English | O | O | O | O | O | O |
| Social Studies | O | O | O | O | O | O |
| Science | O | O | O | O | O | O |

Appendix C

The Original Quality of School Life Scale

Name _____

School _____

Grade _____ Boy ____ Girl ____

9-83101

Published by

Houghton Mifflin Company



# QSL

## The Quality of School Life Scale

**Joyce L. Epstein**
**James M. McPartland**
The Johns Hopkins University

**To The Students:**

The questions in this booklet will help you and others who seek to improve schools to understand how you feel about school and things that happen in school.

Read each question carefully. Then mark **one** answer that is closest to what you think. Remember — **this is not a test.** There are **no** right or wrong answers. Please work on your own. It is important to tell what YOU really think.

Circle T or F if the following statements are TRUE or FALSE for **YOU.**

1. T F **In class, I often count the minutes till it ends.**
2. T F **I wish I could have the same teachers next year.**
3. T F **Most of the time I do not want to go to school.**
4. T F **Most of my teachers want me to do things their way and not my own way.**
5. T F **I hardly ever do anything very exciting in class.**
6. T F **My teachers often act as if they are always right and I am wrong.**
7. T F **I am very happy when I am in school.**
8. T F **Most of my teachers really listen to what I have to say.**
9. T F **I daydream a lot in class.**
10. T F **Certain students in my classes are favored by my teachers more than the rest.**
11. T F **I like school very much.**
12. T F **Teachers here have a way with students that makes me like them.**
13. T F **Most of the topics we study in class can't end soon enough to suit me.**
14. T F **Most of my teachers do not like me to ask a lot of questions during a lesson.**

Check **one** ( ✓) answer that tells best what **YOU** think.

15. **This term I am eager to get to . . .**
    - ____ 1. all my classes.
    - ____ 2. most of my classes.
    - ____ 3. about half my classes.
    - ____ 4. one or two classes.
    - ____ 5. none of my classes.

16. **How would you rate the ability of most of your teachers compared to teachers in other schools at your grade level? My teachers are . . .**
    - ____ 1. far above average.
    - ____ 2. above average.
    - ____ 3. average.
    - ____ 4. below average.
    - ____ 5. far below average.

17. **In my classes I get so interested in an assignment or project that I don't want to stop work.**
    - ____ 1. Never.
    - ____ 2. Hardly ever.
    - ____ 3. Quite often.
    - ____ 4. Every day.

Check **one** ( ✓) answer that tells best what **YOU** think.

**18. Thinking of my teachers this term, I really like . . .**

____ 1. all of them.
____ 2. most of them.
____ 3. half of them.
____ 4. one or two of them.
____ 5. none of them.

**19. The school and I are like . . .**

____ 1. good friends.
____ 2. friends.
____ 3. distant relatives.
____ 4. strangers.
____ 5. enemies.

**20. The work I do in most classes is . . .**

____ 1. not at all important to me.
____ 2. not too important to me.
____ 3. pretty important to me.
____ 4. very important to me.

**21. This term my teachers and I are . . .**

____ 1. on the same wave length.
____ 2. on the same planet.
____ 3. somewhere in the same solar system.
____ 4. in two different worlds.

**22. The things I get to work on in most of my classes are . . .**

____ 1. great stuff — really interesting to me.
____ 2. good stuff — pretty interesting to me.
____ 3. OK — school work is school work.
____ 4. dull stuff — not very interesting to me.
____ 5. trash — a total loss for me.

**23. If you could choose to take any courses at all, how many of your present courses would you take?**

____ 1. All of them.
____ 2. More than half.
____ 3. About half.
____ 4. Fewer than half.
____ 5. None of them.

Read each statement. Then check ( ✓) Always, Often, Sometimes, Seldom **or** Never to tell **how often** the statement is true for **YOU.**

| | ALWAYS | OFTEN | SOME-TIMES | SELDOM | NEVER |
|---|---|---|---|---|---|
| **24. I enjoy the work I do in class.** | ____ | ____ | ____ | ____ | ____ |
| **25. Work in class is just busy work and a waste of time.** | ____ | ____ | ____ | ____ | ____ |
| **26. I feel I can go to my teacher with the things that are on my mind.** | ____ | ____ | ____ | ____ | ____ |
| **27. School work is dull and boring for me.** | ____ | ____ | | | |

Now you may comment in your own words about the quality of life in school:

Some students say: "Overall, I like school."
Others say: "Overall, I hate school."
How do you feel and why?

S
C
T

Appendix D

Student Opinion Inventory

INSTRUCTIONS FOR USE

# Student Opinion Inventory



NATIONAL STUDY OF SCHOOL EVALUATION

2201 Wilson Boulevard, Arlington, Virginia 22201

# STUDENT OPINION INVENTORY

The purpose of this questionnaire is to assist your school in learning more about its instructional program. Your opinions and attitudes are of vital importance in helping your school learn more about itself.

This is not a test. There are no right or wrong answers. The answers you give will be completely confidential. Do not sign your name or identify yourself in any way.

Remember, you will be assisting your school in learning more about itself.

## PART A

### Directions

Please read each item carefully. Note there are five responses below each item. Select the response which most clearly represents your feelings, and circle the letter immediately to the left of the response selected.

**Example:** How satisfied are you with your progress in mathematics this year?

A. Very satisfied
(B) Satisfied
C. Neither satisfied nor dissatisfied
D. Dissatisfied
E. Very dissatisfied

The Student Opinion Inventory, Part A, is packaged separately and may be purchased in quantity from the National Study of School Evaluation.

**NATIONAL STUDY OF SCHOOL EVALUATION**

2201 Wilson Boulevard, Arlington, Virginia 22201

# STUDENT OPINION INVENTORY

## PART A

1. In how many of the student activities that you participate in are the students involved in planning the activity?
   A. All
   B. Many
   C. About half
   D. Few
   E. None

2. In how many of the activities of your school would you feel that you would be accepted?
   A. All
   B. Most
   C. About half
   D. Few
   E. None

3. How many student activities (clubs, parties, plays, athletics, etc.) that you would like to participate in, do you participate in?
   A. All
   B. Most
   C. About half
   D. Few
   E. None

4. How often do you feel that you "belong" in your school?
   A. Always
   B. Usually
   C. About half the time
   D. Seldom
   E. Never

5. How many sponsors of the activities that you participate in seem well suited to the activity?
   A. All
   B. Most
   C. About half
   D. Few
   E. None

6. How many of your teachers seem to care if you learn the subject they teach?
   A. All
   B. Most
   C. About half
   D. Few
   E. None

7. How often do your teachers clearly explain *what* to do on assignments?
   A. Always
   B. Usually
   C. About half the time
   D. Seldom
   E. Never

8. How much help do your teachers usually give you with your schoolwork?
   A. All the help I need
   B. Most of the help I need
   C. About half the help I need
   D. A little of the help I need
   E. None of the help I need

9. How many of your teachers make sure you understand what they teach in class?
   A. All
   B. Most
   C. About half
   D. Few
   E. None

10. How often do your teachers clearly explain *how* assignments are to be done?
    A. Always
    B. Usually
    C. About half the time
    D. Seldom
    E. Never

11. How many of your teachers are willing to give students individual help outside of class time?
    A. All
    B. Most
    C. About half
    D. Few
    E. None

12. How many of your teachers give you enough personal encouragement in your schoolwork?
    A. All
    B. Most
    C. About half
    D. Few
    E. None

13. How much help does your counselor give you in the selection of a college, vocational, or trade school?
    A. All the help I need
    B. Most of the help I need
    C. About half the help I need
    D. Little of the help I need
    E. None of the help I need

14. How much help does your counselor give you in the selection of courses?
    A. All the help I need
    B. Most of the help I need
    C. About half the help I need
    D. Little of the help I need
    E. None of the help I need

15. In general, are you satisfied or dissatisfied with the way you are treated by your counselor?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

16. How much help does your counselor give you in the selection of a vocation?
    A. All the help I need
    B. Most of the help I need
    C. About half the help I need
    D. Little of the help I need
    E. None of the help I need

17. How much help does your counselor give you in solving your personal problems?
    A. All the help I need
    B. Most of the help I need
    C. About half the help I need
    D. Little of the help I need
    E. None of the help I need

18. If you had a problem or suggestion for the administration, how long would you have to wait to talk to a member of the administration?
    A. I could talk to the administration immediately.
    B. I could talk to the administration within the day.
    C. I could talk to the administration within a week.
    D. I could talk to the administration within a month.
    E. I couldn't talk to the administration at all.

19. In general, are you satisfied or dissatisfied with the way you are treated by the administration?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

20. In general, how often does the administration seem to really care about you as an individual?
    A. Always
    B. Usually
    C. About half the time
    D. Seldom
    E. Never

21. Are you satisfied or dissatisfied with the way the administration includes the students in making decisions about matters which directly affect the students (dress code, assemblies, etc.)?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

22. How much personal encouragement does the administration give you concerning your schoolwork?
    A. All the encouragement I need
    B. Most of the encouragement I need
    C. About half the encouragement I need
    D. Little of the encouragement I need
    E. None of the encouragement I need

23. Does the administration talk to you as an individual on all occasions?
    A. Always
    B. Usually
    C. About half the time
    D. Seldom
    E. Never

24. How much of what you are studying do you think will be useful to you in everyday living?
    A. Everything I am studying
    B. Most of what I am studying
    C. About half of what I am studying
    D. Less than half of what I am studying
    E. None of what I am studying

25. In how many of your courses are you satisfied with the methods used to teach the courses?
    A. All
    B. Most
    C. About half
    D. Few
    E. None

26. Regardless of what your grades may be, in how many of your school subjects would you say that you are "learning a lot" this year?
    A. In all my subjects
    B. In most of my subjects
    C. In about half of my subjects
    D. In less than half of my subjects
    E. In none of my subjects

27. How many of the things that you should be learning right now are being taught in your school?
    A. All
    B. Most
    C. About half
    D. Few
    E. None

28. All things considered, how much do you think you are learning from your schoolwork?
    A. All that I can learn
    B. Almost all that I can learn
    C. About half of what I can learn
    D. Somewhat less than I can learn
    E. Considerably less than I can learn

29. In general, how proud or ashamed of your school are you?
    A. I am very proud of my school.
    B. I am proud of my school.
    C. I am neither proud nor ashamed of my school.
    D. I am ashamed of my school.
    E. I am very ashamed of my school.

30. How would you rate "school spirit" at your school? (Consider students support of athletic teams, charity drives, class money-raising projects, etc.)
    A. Excellent
    B. Good
    C. Adequate
    D. Poor
    E. Very poor

31. In general, are you satisfied or dissatisfied with your school?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

32. In general, how well satisfied are you with the variety of the subjects that your school offers?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

33. How satisfied or dissatisfied are you with the variety of student activities that your school offers?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

34. How satisfied are you with the number of student activities that your school offers?
    A. Very satisfied
    B. Satisfied
    C. Neither satisfied nor dissatisfied
    D. Dissatisfied
    E. Very dissatisfied

# Appendix E

## Documentation on Imputed Data

Output 6 — Imputed Learning for those students who failed to answer 1 question.

#10) 8800327 - for question #1 (3)

1
2 IIII
3 ++++ ++++ IIII
4 ++++
5 III

#13) 8800071 - for question # 2 (4)

1 II
2 IIII
3 ++++
4 ++++ ++++ I
5 IIII

#8) 9300689 - for question # 13 (1)

1 ++++ ++++ ++++ II
2 IIII
3 III
4
5 I

2) 9301496 - for question # 16 (4)

1 I
2 II
3 ++++ IIII
4 ++++ ++++ II
5 II

3) 9201033 - for question # 16 (2)

1 ++++
2 ++++ ++++ II
3 ++++ II
4 II
5

5) 9700184 - for question # 16 (4)

1
2
3 ++++ ++++
4 ++++ ++++ II
5 IIII

6) 8800299 - for question #16 (4)

1
2 II
3 ++++ ++++
4 IIII IIII III

7) 9000785 - question # 16 (1)

1 ++++ ++++ I
2 ++++ I
3 ++++
4 III
5 I

12) 8900369 - question # 14 (3)

1 ++++ II
2 ++++ IIII
3 ++++ IIII
4 II
5

1) 9501042 - question # 19 (4)

1
2 II
3 ++++ ++++
4 ++++ ++++ II
5 II

9) 8900285 - question # 22 (3)

1 IIII
2 ++++ I
3 ++++ ++++ II
4 III
5 II

Students Eliminated because they failed to answer 2 or more questions on the QSL scale

8700186 - Evan Blaw
#11 - questions 12, 13, 14, 15, 16, 17

9701153 - Christos Prentzas
#14 - questions 13, 14, 15, 16

9001113 - Catherine Bobkin
#4 questions # 16, 19

Asked them to complete

**Case Summaries[a]**

| | | ID | Q1 5 | Q2 1 | Q3 5 | Q4 5 | Q5 5 | Q6 5 |
|---|---|---|---|---|---|---|---|---|
| 1 | | 9501042.0 | 4.00 | 3.00 | 4.00 | 2.00 | 3.00 | 3.00 |
| 2 | | 9301496.0 | 4.00 | 3.00 | 3.00 | 4.00 | 1.00 | 4.00 |
| 3 | | 9201033.0 | 1.00 | 2.00 | 3.00 | 3.00 | 2.00 | 2.00 |
| 4 | | 9001113.0 | 2.00 | 2.00 | 1.00 | 3.00 | 2.00 | 4.00 |
| 5 | | 9700184.0 | 3.00 | 3.00 | 3.00 | 3.00 | 4.00 | 4.00 |
| 6 | | 8800299.0 | 4.00 | 4.00 | 3.00 | 2.00 | 2.00 | 4.00 |
| 7 | | 9000785.0 | 1.00 | 2.00 | 1.00 | 3.00 | 2.00 | 4.00 |
| 8 | | 9300689.0 | 1.00 | 3.00 | 1.00 | 1.00 | 1.00 | 3.00 |
| 9 | | 8900285.0 | 4.00 | 3.00 | 2.00 | 5.00 | 2.00 | 3.00 |
| 10 | | 8800327.0 | . | 4.00 | 3.00 | 3.00 | 2.00 | 4.00 |
| 11 | | 8700186.0 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 4.00 |
| 12 | | 8900369.0 | 2.00 | 3.00 | 1.00 | 1.00 | 2.00 | 2.00 |
| 13 | | 8800071.0 | 2.00 | . | 4.00 | 3.00 | 2.00 | 4.00 |
| 14 | | 9701153.0 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 2.00 |
| 15 | | 8800403.0 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Total | N | 15 | 14 | 14 | 15 | 15 | 15 | 15 |

**Case Summaries[a]**

| | | Q7 1 | Q8 1 | Q9 5 | Q10 5 | Q11 1 | Q12 1 | Q13 5 |
|---|---|---|---|---|---|---|---|---|
| 1 | | 3.00 | 3.00 | 5.00 | 4.00 | 4.00 | 3.00 | 4.00 |
| 2 | | 4.00 | 3.00 | 4.00 | 4.00 | 3.00 | 3.00 | 4.00 |
| 3 | | 4.00 | 3.00 | 1.00 | 2.00 | 4.00 | 3.00 | 1.00 |
| 4 | | 2.00 | 3.00 | 3.00 | 4.00 | 1.00 | 2.00 | 3.00 |
| 5 | | 4.00 | 4.00 | 5.00 | 4.00 | 3.00 | 3.00 | 3.00 |
| 6 | | 3.00 | 3.00 | 4.00 | 5.00 | 4.00 | 4.00 | 3.00 |
| 7 | | 1.00 | 3.00 | 1.00 | 4.00 | 1.00 | 2.00 | 3.00 |
| 8 | | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | . |
| 9 | | 2.00 | 4.00 | 3.00 | 2.00 | 1.00 | 3.00 | 1.00 |
| 10 | | 3.00 | 4.00 | 2.00 | 5.00 | 3.00 | 4.00 | 3.00 |
| 11 | | 3.00 | 4.00 | 4.00 | 4.00 | 3.00 | . | . |
| 12 | | 3.00 | 3.00 | 1.00 | 3.00 | 1.00 | 2.00 | 3.00 |
| 13 | | 4.00 | 4.00 | 2.00 | 5.00 | 4.00 | 4.00 | 2.00 |
| 14 | | 1.00 | 2.00 | 1.00 | 4.00 | 3.00 | 1.00 | . |
| 15 | | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Total | N | 15 | 15 | 15 | 15 | 15 | 14 | 12 |

**Case Summaries[a]**

| | Q14 5 | Q15 1 | Q16 1 | Q17 5 | Q18 1 | Q19 1 | Q20 5 |
|---|---|---|---|---|---|---|---|
| 1 | 3.00 | 4.00 | 4.00 | 3.00 | 4.00 | . | 4.00 |
| 2 | 5.00 | 5.00 | . | 2.00 | 4.00 | 4.00 | 4.00 |
| 3 | 2.00 | 2.00 | . | 2.00 | 2.00 | 3.00 | 3.00 |
| 4 | 2.00 | 5.00 | . | 2.00 | 2.00 | . | 3.00 |
| 5 | 4.00 | 4.00 | . | 3.00 | 4.00 | 4.00 | 5.00 |
| 6 | 4.00 | 4.00 | . | 3.00 | 4.00 | 3.00 | 4.00 |
| 7 | 5.00 | 1.00 | . | 1.00 | 2.00 | 2.00 | 2.00 |
| 8 | 1.00 | 1.00 | 1.00 | 1.00 | 3.00 | 5.00 | 1.00 |
| 9 | 4.00 | 2.00 | 3.00 | 1.00 | 3.00 | 3.00 | 3.00 |
| 10 | 3.00 | 5.00 | 3.00 | 3.00 | 4.00 | 5.00 | 3.00 |
| 11 | . | . | . | . | 4.00 | 4.00 | 4.00 |
| 12 | . | 2.00 | 3.00 | 3.00 | 3.00 | 4.00 | 4.00 |
| 13 | 4.00 | 3.00 | 4.00 | 1.00 | 5.00 | 4.00 | 5.00 |
| 14 | . | . | . | 2.00 | 2.00 | 2.00 | 2.00 |
| 15 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 1.00 | 1.00 |
| Total N | 12 | 13 | 7 | 14 | 15 | 13 | 15 |

**Case Summaries[a]**

| | Q21 1 | Q22 1 | Q23 1 | Q24 1 | Q25 5 | Q26 1 | Q27 5 |
|---|---|---|---|---|---|---|---|
| 1 | 4.00 | 4.00 | 5.00 | 4.00 | 3.00 | 2.00 | 3.00 |
| 2 | 4.00 | 3.00 | 3.00 | 3.00 | 4.00 | 2.00 | 3.00 |
| 3 | 2.00 | 2.00 | 2.00 | 2.00 | 3.00 | 1.00 | 1.00 |
| 4 | 3.00 | 2.00 | 2.00 | 2.00 | 3.00 | 2.00 | 3.00 |
| 5 | 5.00 | 4.00 | 4.00 | 3.00 | 4.00 | 5.00 | 3.00 |
| 6 | 4.00 | 4.00 | 3.00 | 3.00 | 3.00 | 4.00 | 3.00 |
| 7 | 4.00 | 1.00 | 1.00 | 1.00 | 3.00 | 3.00 | 1.00 |
| 8 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.00 |
| 9 | 5.00 | . | 3.00 | 2.00 | 3.00 | 3.00 | 3.00 |
| 10 | 3.00 | 3.00 | 3.00 | 2.00 | 3.00 | 2.00 | 3.00 |
| 11 | 5.00 | 4.00 | 5.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| 12 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 1.00 |
| 13 | 3.00 | 4.00 | 4.00 | 3.00 | 5.00 | 1.00 | 3.00 |
| 14 | 2.00 | 2.00 | 2.00 | 1.00 | 2.00 | 1.00 | 1.00 |
| 15 | 2.00 | 1.00 | 2.00 | 1.00 | 2.00 | 1.00 | 1.00 |
| Total N | 15 | 14 | 15 | 15 | 15 | 15 | 15 |

## Summarize

**Case Processing Summary[a]**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Included | | Excluded | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| ID | | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q1 | 5 | 14 | 93.3% | 1 | 6.7% | 15 | 100.0% |
| Q2 | 1 | 14 | 93.3% | 1 | 6.7% | 15 | 100.0% |
| Q3 | 5 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q4 | 5 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q5 | 5 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q6 | 5 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q7 | 1 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q8 | 1 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q9 | 5 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q10 | 5 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q11 | 1 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q12 | 1 | 14 | 93.3% | 1 | 6.7% | 15 | 100.0% |
| Q13 | 5 | 12 | 80.0% | 3 | 20.0% | 15 | 100.0% |
| Q14 | 5 | 12 | 80.0% | 3 | 20.0% | 15 | 100.0% |
| Q15 | 1 | 13 | 86.7% | 2 | 13.3% | 15 | 100.0% |
| Q16 | 1 | 7 | 46.7% | 8 | 53.3% | 15 | 100.0% |
| Q17 | 5 | 14 | 93.3% | 1 | 6.7% | 15 | 100.0% |
| Q18 | 1 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q19 | 1 | 13 | 86.7% | 2 | 13.3% | 15 | 100.0% |
| Q20 | 5 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q21 | 1 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q22 | 1 | 14 | 93.3% | 1 | 6.7% | 15 | 100.0% |
| Q23 | 1 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q24 | 1 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q25 | 5 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q26 | 1 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| Q27 | 5 | 15 | 100.0% | 0 | .0% | 15 | 100.0% |
| SCORE | | 1 | 6.7% | 14 | 93.3% | 15 | 100.0% |
| SAT | | 13 | 86.7% | 2 | 13.3% | 15 | 100.0% |
| COM | | 10 | 66.7% | 5 | 33.3% | 15 | 100.0% |
| TCH | | 5 | 33.3% | 10 | 66.7% | 15 | 100.0% |

a. Limited to first 15 cases.

**Case Summaries[a]**

| | | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|
| 1 | | . | . | 42.00 | 35.00 |
| 2 | | . | 17.00 | 37.00 | . |
| 3 | | . | 16.00 | 20.00 | . |
| 4 | | . | . | 30.00 | . |
| 5 | | . | 17.00 | 42.00 | . |
| 6 | | . | 16.00 | 37.00 | . |
| 7 | | . | 6.00 | 17.00 | . |
| 8 | | . | 11.00 | . | 18.00 |
| 9 | | . | 10.00 | . | 38.00 |
| 10 | | . | 16.00 | . | 39.00 |
| 11 | | . | 16.00 | . | . |
| 12 | | . | 11.00 | 22.00 | . |
| 13 | | . | 19.00 | 33.00 | . |
| 14 | | . | 8.00 | . | . |
| 15 | | 37.00 | 5.00 | 14.00 | 18.00 |
| Total | N | 1 | 13 | 10 | 5 |

a. Limited to first 15 cases.

Appendix F

Traditional Indicators Data Sheet

| Name | ID | Level | Score | gr1 | gr2 | E | C | AB | LTS | RLT | Cuts | Det | Sus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8800403 | R | 37 | 3 | 3 | 3 | 0 | 11 | 5 | 0 | 3 | 1 | 0 |
| | 9300689 | A | 41 | 5 | 6 | 5 | 4 | 10 | 8 | 4 | 0 | 10 | 1 |
| | 9701094 | A | 43 | 3 | 6 | 4 | 0 | 3 | 0 | 6 | 0 | 2 | 0 |
| | 8800405 | H | 43 | 0 | 1 | 1 | 0 | 9 | 1 | 0 | 0 | 0 | 0 |
| | 9101056 | R | 46 | 12 | 15 | 6 | 3 | 13 | 10 | 6 | 0 | 8 | 1 |
| | 8900198 | A | 46 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 |
| | 8800411 | R | 48 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| | 9701153 | ESL | 51 | 6 | 13 | 7 | 1 | 7 | 18 | 0 | 0 | 4 | 0 |
| | 8800246 | A | 53 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 9701356 | R | 53 | 9 | 9 | 4 | 0 | 10 | 11 | 0 | 19 | 8 | 0 |
| | 8700325 | R | 53 | 12 | 6 | 4 | 1 | 11 | 4 | 3 | 0 | 1 | 0 |
| | 8900569 | A | 53 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 9700895 | R | 53 | 6 | 6 | 5 | 3 | 3 | 3 | 0 | 1 | 6 | 1 |
| | 8900196 | M | 54 | 3 | 3 | 3 | 0 | 5 | 1 | 0 | 0 | 0 | 0 |
| | 9401343 | A | 54 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 2 | 0 |
| | 9401146 | A | 56 | 1 | 3 | 3 | 0 | 21 | 10 | 0 | 18 | 3 | 1 |
| | 9301127 | R | 55 | 6 | 10 | 6 | 3 | 10 | 8 | 3 | 4 | 9 | 2 |
| | 8800606 | A | 55 | 0 | 1 | 0 | 0 | 3 | 4 | 0 | 1 | 0 | 0 |
| | 8800101 | A | 55 | 5 | 4 | 5 | 0 | 7 | 12 | 0 | 0 | 2 | 1 |
| | 9000785 | A | 56 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| | 9201347 | A | 56 | 2 | 2 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8800318 | R | 56 | 0 | 0 | 1 | 2 | 6 | 5 | 0 | 1 | 1 | 0 |
| | 8800308 | M | 57 | 10 | 6 | 3 | 4 | 5 | 1 | 0 | 6 | 14 | 0 |
| | 8800316 | A | 57 | 1 | 2 | 2 | 0 | 9 | 6 | 0 | 7 | 15 | 2 |
| | 9001368 | R | 57 | 0 | 2 | 2 | 0 | 5 | 10 | 0 | 0 | 2 | 0 |
| | 8800477 | A | 58 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 |
| | 9301335 | A | 58 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 |
| | 8800450 | R | 58 | 0 | 0 | 1 | 0 | 5 | 1 | 0 | 0 | 0 | 0 |
| | 8800619 | M | 59 | 5 | 7 | 5 | 3 | 20 | 11 | 7 | 11 | 7 | 2 |
| | 8800476 | H | 59 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 9201033 | A | 60 | 1 | 2 | 3 | 0 | 3 | 4 | 0 | 0 | 0 | 0 |
| | 9000889 | A | 60 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 9200984 | M | 60 | 0 | 0 | 0 | 0 | 9 | 3 | 3 | 6 | 4 | 2 |
| | 8800073 | A | 60 | 1 | 0 | 2 | 1 | 2 | 5 | 0 | 2 | 2 | 0 |
| | 8800336 | M | 60 | 5 | 8 | 7 | 3 | 9 | 7 | 0 | 5 | 4 | 2 |
| | 8900369 | A | 61 | 0 | 1 | 2 | 0 | 6 | 7 | 0 | 5 | 1 | 0 |
| | 9501422 | A | 61 | 0 | 2 | 2 | 0 | 0 | 1 | 3 | 1 | 2 | 0 |
| | 8700888 | R | 61 | 0 | 2 | 2 | 1 | 11 | 13 | 7 | 1 | 8 | 1 |
| | 8800433 | R | 61 | 2 | 0 | 1 | 1 | 4 | 8 | 0 | 1 | 2 | 0 |
| | 8800941 | M | 61 | 11 | 14 | 10 | 5 | 11 | 6 | 0 | 0 | 4 | 1 |
| | 8800324 | A | 61 | 0 | 0 | 1 | 0 | 7 | 0 | 4 | 0 | 1 | 0 |
| | 8800468 | A | 61 | 0 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 0 | 0 |
| | 8800554 | R | 62 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 8700208 | R | 62 | 1 | 1 | 2 | 2 | 5 | 6 | 0 | 1 | 2 | 0 |
| | 9000873 | A | 62 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| | 8900473 | H | 62 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9500790 | H | 62 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| | 9200841 | A | 63 | 0 | 0 | 2 | 1 | 6 | 0 | 0 | 0 | 0 | 0 |
| | 8800455 | A | 63 | 0 | 0 | 0 | 0 | 4 | 7 | 0 | 0 | 1 | 0 |
| | 9201386 | A | 63 | 1 | 0 | 2 | 0 | 7 | 1 | 0 | 0 | 0 | 0 |
| | 8800596 | A | 63 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| | 9201289 | A | 63 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 8800093 | A | 64 | 3 | 3 | 5 | 1 | 2 | 2 | 0 | 0 | 0 | 0 |
| | 8800406 | A | 64 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 |
| | 8901015 | A | 64 | 0 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 2 | 0 |

| | ID | L | Score | gr1 | gr2 | E | C | AB | LTS | RLT | Cuts | Det | Sus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8800551 | A | 64 | 1 | 3 | 2 | 0 | 10 | 6 | 0 | 2 | 2 | 0 |
| | 9301174 | R | 64 | 1 | 2 | 1 | 0 | 4 | 4 | 0 | 0 | 1 | 0 |
| | 8800260 | H | 64 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 0 |
| | 9801206 | R | 65 | 2 | 1 | 2 | 0 | 15 | 7 | 0 | 0 | 1 | 0 |
| | 8800110 | A | 65 | 0 | 0 | 0 | 0 | 1 | 7 | 0 | 0 | 2 | 0 |
| | 8800320 | H | 65 | 2 | 1 | 2 | 0 | 10 | 8 | 0 | 0 | 2 | 0 |
| | 8800092 | H | 65 | 0 | 1 | 0 | 0 | 7 | 4 | 0 | 3 | 2 | 0 |
| | 9700825 | A | 66 | 4 | 4 | 1 | 0 | 4 | 6 | 0 | 0 | 1 | 0 |
| | 9401157 | H | 66 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| | 9700745 | R | 66 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 0 | 0 | 0 |
| | 9701424 | A | 66 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| | 8700279 | R | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800087 | H | 66 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 9001113 | A | 67 | 2 | 6 | 1 | 0 | 28 | 7 | 0 | 13 | 5 | 0 |
| | 8800579 | A | 67 | 0 | 0 | 0 | 0 | 8 | 9 | 3 | 1 | 3 | 0 |
| | 8800518 | A | 67 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8900197 | H | 67 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 0 |
| | 9301117 | R | 67 | 0 | 0 | 1 | 0 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 9000998 | R | 67 | 4 | 1 | 2 | 0 | 3 | 3 | 0 | 0 | 0 | 0 |
| | 8800097 | A | 67 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| | 9001460 | A | 67 | 0 | 6 | 3 | 0 | 12 | 2 | 0 | 0 | 0 | 0 |
| | 8900699 | R | 67 | 0 | 1 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 |
| | 9301378 | R | 67 | 4 | 4 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 8900318 | A | 68 | 0 | 1 | 1 | 1 | 8 | 0 | 0 | 0 | 0 | 0 |
| | 8800305 | R | 68 | 0 | 1 | 1 | 0 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 8800526 | A | 68 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 0 |
| | 8800079 | A | 68 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 8800447 | A | 68 | 1 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 |
| | 8800461 | A | 68 | 2 | 2 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| | 8900885 | R | 68 | 0 | 1 | 0 | 0 | 5 | 0 | 0 | 1 | 1 | 0 |
| | 9800952 | R | 68 | 3 | 1 | 2 | 0 | 9 | 1 | 0 | 0 | 0 | 0 |
| | 9500899 | A | 69 | 3 | 1 | 1 | 0 | 7 | 6 | 4 | 2 | 5 | 0 |
| | 8800575 | A | 69 | 1 | 2 | 3 | 0 | 3 | 4 | 0 | 0 | 0 | 0 |
| | 8900286 | A | 69 | 0 | 0 | 0 | 0 | 20 | 2 | 0 | 0 | 0 | 0 |
| | 8800474 | R | 69 | 0 | 0 | 2 | 0 | 5 | 4 | 3 | 1 | 2 | 0 |
| | 8800325 | R | 69 | 2 | 5 | 3 | 1 | 7 | 11 | 0 | 3 | 1 | 1 |
| | 8800321 | A | 70 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| | 9700810 | R | 70 | 0 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 |
| | 8900368 | H | 70 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 8800483 | A | 71 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 |
| | 9101261 | A | 71 | 1 | 1 | 1 | 0 | 8 | 5 | 0 | 1 | 1 | 0 |
| | 8800509 | A | 71 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8800523 | A | 71 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8800084 | A | 71 | 0 | 0 | 0 | 1 | 6 | 2 | 0 | 0 | 0 | 0 |
| | 8800437 | A | 72 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 0 | 0 | 0 |
| | 9101274 | H | 72 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 8800987 | H | 72 | 0 | 0 | 0 | 0 | 12 | 3 | 0 | 0 | 0 | 0 |
| | 9101460 | H | 72 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| | 8800425 | A | 72 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 |
| | 8800706 | M | 72 | 0 | 0 | 2 | 0 | 1 | 2 | 0 | 2 | 2 | 0 |
| | 8700288 | M | 72 | 0 | 1 | 0 | 0 | 7 | 5 | 3 | 0 | 2 | 0 |
| | 9101036 | A | 72 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| | 8800413 | A | 72 | 0 | 0 | 1 | 0 | 4 | 4 | 0 | 0 | 0 | 0 |
| | 8800467 | A | 72 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 |
| 25% ↑ | 9201128 | H | 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | ID | L | Score | gr1 | gr2 | E | C | AB | LTS | RLT | Cuts | Det | Sus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8800424 | H | 73 | chronic illness - drop from study | | | | | | | | | |
| | 8800457 | A | 73 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8901138 | M | 73 | 1 | 2 | 6 | 2 | 8 | 3 | 12 | 1 | 7 | 2 |
| | 9400989 | M | 73 | 4 | 7 | 6 | 1 | 15 | 13 | 4 | 11 | 5 | 1 |
| | 8700324 | M | 73 | 0 | 2 | 2 | 0 | 4 | 0 | 0 | 1 | 1 | 0 |
| | 8800475 | R | 73 | 3 | 1 | 3 | 0 | 7 | 0 | 0 | 3 | 3 | 0 |
| | 9700846 | A | 73 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 8800332 | A | 73 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8900315 | H | 73 | 0 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 |
| | 8900551 | H | 74 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8901253 | H | 74 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| | 8800469 | R | 74 | 0 | 2 | 1 | 0 | 2 | 6 | 0 | 0 | 2 | 0 |
| | 9601165 | M | 74 | 3 | 6 | 4 | 5 | 4 | 4 | 0 | 1 | 5 | 0 |
| | 8800479 | A | 74 | 1 | 2 | 2 | 1 | 11 | 8 | 0 | 0 | 0 | 0 |
| | 8800400 | R | 74 | 1 | 3 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 9501038 | R | 74 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| | 9201448 | R | 74 | 17 | 24 | 11 | 1 | 13 | 7 | 10 | 23 | 6 | 3 |
| | 8800355 | H | 74 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8800510 | A | 75 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8800548 | A | 75 | 0 | 0 | 0 | 0 | 13 | 6 | 0 | 0 | 1 | 0 |
| | 8800310 | A | 75 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 |
| | 8800428 | A | 75 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 9001323 | H | 75 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8900285 | R | 76 | 0 | 3 | 3 | 3 | 8 | 6 | 0 | 0 | 2 | 0 |
| | 8800495 | A | 76 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 |
| | 8700191 | A | 76 | 1 | 6 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| | 9500833 | R | 76 | 0 | 0 | 0 | 0 | 2 | 5 | 7 | 1 | 4 | 0 |
| | 8800103 | A | 76 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8800685 | R | 76 | 0 | 0 | 2 | 1 | 8 | 7 | 8 | 2 | 5 | 0 |
| | 8800525 | A | 76 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 9700967 | R | 76 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| | 9300797 | A | 77 | 2 | 1 | 3 | 0 | 6 | 5 | 0 | 0 | 1 | 0 |
| | 8800489 | A | 77 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 |
| | 8800481 | H | 77 | 0 | 0 | 0 | 0 | 11 | 1 | 0 | 0 | 0 | 0 |
| | 9000874 | H | 77 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 9700781 | M | 77 | 0 | 0 | 1 | 0 | 4 | 4 | 0 | 0 | 0 | 0 |
| | 8900678 | A | 77 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8800095 | A | 77 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| | 8900634 | A | 77 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8901344 | A | 77 | 0 | 0 | 0 | 0 | 5 | 10 | 0 | 0 | 0 | 0 |
| | 8800240 | A | 77 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 1 | 0 |
| | 9101331 | A | 77 | 0 | 0 | 1 | 0 | 7 | 6 | 0 | 1 | 2 | 0 |
| | 9701215 | R | 78 | 1 | 6 | 2 | 0 | 21 | 7 | 9 | 2 | 7 | 1 |
| | 8800421 | M | 78 | 3 | 5 | 5 | 1 | 4 | 4 | 3 | 3 | 4 | 0 |
| | 8800464 | A | 78 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 8800500 | R | 78 | 1 | 1 | 1 | 0 | 9 | 2 | 0 | 0 | 0 | 1 |
| | 8800420 | R | 78 | 0 | 1 | 2 | 3 | 5 | 10 | 3 | 1 | 2 | 0 |
| | 8800555 | A | 79 | 0 | 0 | 0 | 0 | 2 | 5 | 4 | 0 | 2 | 0 |
| | 8800317 | A | 79 | 2 | 1 | 3 | 0 | 5 | 1 | 6 | 16 | 3 | 1 |
| | 9600906 | R | 79 | 2 | 1 | 2 | 0 | 5 | 3 | 3 | 3 | 4 | 0 |
| | 8800427 | R | 79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8700887 | R | 79 | 1 | 3 | 0 | 0 | 13 | 18 | 0 | 2 | 4 | 1 |
| | 8700213 | M | 79 | 2 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8800488 | A | 79 | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 0 |
| | 9101504 | A | 79 | 2 | 1 | 2 | 0 | 6 | 8 | 0 | 0 | 1 | 0 |

| | ID | L | Score | gr1 | gr2 | E | C | AB | LTS | RLT | Cuts | Det | Sus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8800556 | A | 79 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 |
| | 9001297 | A | 79 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 9300993 | A | 79 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8800083 | R | 79 | 0 | 1 | 1 | 0 | 5 | 4 | 0 | 0 | 0 | 0 |
| | 8800602 | R | 79 | 1 | 7 | 2 | 1 | 0 | 0 | 5 | 0 | 7 | 1 |
| | 8800082 | H | 79 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 |
| | 8800452 | A | 80 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8800480 | A | 80 | 2 | 6 | 4 | 0 | 5 | 6 | 0 | 3 | 4 | 0 |
| | 8800472 | A | 80 | 2 | 0 | 2 | 0 | 10 | 14 | 0 | 0 | 2 | 0 |
| | 8900530 | H | 80 | 1 | 1 | 1 | 1 | 4 | 4 | 0 | 2 | 2 | 0 |
| | 9701445 | R | 80 | 0 | 2 | 1 | 1 | 11 | 12 | 3 | 7 | 11 | 1 |
| | 9600753 | A | 80 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 1 | 0 |
| | 8700541 | R | 80 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 1 | 0 |
| | 9700492 | R | 80 | 2 | 0 | 1 | 0 | 13 | 0 | 0 | 0 | 0 | 0 |
| | 8800106 | A | 81 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 |
| | 8800076 | H | 81 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 0 |
| | 8800302 | A | 81 | 0 | 0 | 1 | 0 | 8 | 1 | 0 | 0 | 0 | 0 |
| | 8800098 | R | 81 | 5 | 7 | 1 | 1 | 3 | 1 | 0 | 2 | 2 | 0 |
| | 9601024 | A | 81 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| | 9501460 | A | 81 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 8800459 | A | 81 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 1 | 0 | 0 |
| | 8901188 | R | 81 | 6 | 15 | 4 | 3 | 4 | 9 | 6 | 8 | 6 | 0 |
| | 8900351 | H | 81 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8900529 | A | 82 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 9601185 | H | 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800065 | H | 82 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 9101322 | H | 82 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 |
| | 8900316 | H | 82 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| | 8800438 | A | 82 | 4 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800501 | A | 82 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 8900679 | A | 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9500762 | R | 82 | 1 | 1 | 0 | 2 | 12 | 5 | 3 | 0 | 2 | 0 |
| | 8801053 | A | 82 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| | 9300866 | A | 82 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 |
| | 9701126 | A | 82 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 |
| | 9400871 | H | 83 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 0 |
| | 9401007 | A | 83 | 2 | 3 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 |
| | 9501014 | A | 83 | 0 | 0 | 0 | 0 | 4 | 6 | 0 | 0 | 1 | 0 |
| | 8801234 | R | 83 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 |
| | 9100805 | A | 83 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 1 | 1 | 0 |
| | 8800235 | R | 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800109 | H | 83 | 0 | 1 | 0 | 0 | 11 | 2 | 0 | 1 | 1 | 0 |
| | 8800309 | H | 84 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 |
| | 8800108 | H | 84 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 9800849 | A | 84 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 |
| | 8801268 | R | 84 | 2 | 0 | 3 | 0 | 7 | 6 | 0 | 0 | 1 | 0 |
| | 8900907 | M | 84 | 0 | 0 | 2 | 1 | 4 | 1 | 3 | 1 | 7 | 0 |
| | 8800515 | R | 84 | 0 | 1 | 0 | 1 | 4 | 4 | 0 | 1 | 1 | 0 |
| | 9200893 | R | 84 | 0 | 0 | 0 | 1 | 7 | 0 | 0 | 0 | 0 | 0 |
| | 8800536 | R | 84 | 1 | 0 | 0 | 0 | 7 | 6 | 4 | 0 | 2 | 0 |
| | 8800585 | A | 84 | 1 | 0 | 2 | 0 | 2 | 3 | 0 | 0 | 0 | 0 |
| | 8901434 | A | 84 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 8800514 | R | 84 | 0 | 0 | 0 | 1 | 5 | 1 | 0 | 0 | 0 | 0 |
| | 8900370 | A | 85 | 0 | 0 | 0 | 0 | 13 | 4 | 0 | 0 | 0 | 0 |
| | 9301516 | A | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | ID | L | Score | gr1 | gr2 | E | C | AB | LTS | RLT | Cuts | Det | Sus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9401411 | R | 85 | 0 | 0 | 1 | 0 | 3 | 3 | 0 | 1 | 1 | 0 |
| | 8800069 | A | 85 | 0 | 0 | 0 | 1 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 8800522 | A | 85 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 0 |
| | 8700159 | A | 85 | 0 | 0 | 0 | 0 | 4 | 8 | 0 | 0 | 3 | 0 |
| | 9301429 | R | 85 | 2 | 1 | 1 | 2 | 13 | 6 | 0 | 3 | 2 | 1 |
| | 9701371 | R | 85 | 1 | 0 | 1 | 0 | 1 | 5 | 0 | 0 | 0 | 0 |
| | 9101099 | H | 85 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800465 | H | 86 | 0 | 0 | 0 | 0 | 14 | 4 | 0 | 0 | 0 | 0 |
| | 8800451 | H | 86 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8800253 | H | 86 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| | 8800436 | A | 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9701031 | A | 86 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8700430 | R | 86 | 2 | 4 | 1 | 2 | 2 | 4 | 3 | 2 | 3 | 0 |
| | 8900195 | R | 86 | 0 | 0 | 0 | 0 | 2 | 6 | 0 | 0 | 1 | 0 |
| | 9501016 | R | 86 | 3 | 2 | 3 | 0 | 5 | 4 | 0 | 0 | 0 | 0 |
| | 8800508 | R | 86 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 0 |
| | 8700224 | H | 86 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8801065 | H | 86 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 0 |
| | 8800409 | A | 87 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800145 | R | 87 | 0 | 1 | 0 | 0 | 13 | 1 | 0 | 0 | 0 | 0 |
| | 8800068 | R | 87 | 0 | 0 | 1 | 0 | 3 | 5 | 0 | 0 | 0 | 0 |
| | 9101425 | M | 87 | 1 | 0 | 1 | 2 | 6 | 2 | 0 | 0 | 0 | 2 |
| | 9601117 | M | 87 | 3 | 5 | 4 | 0 | 12 | 3 | 8 | 2 | 3 | 1 |
| | 9700097 | A | 87 | 1 | 0 | 0 | 0 | 6 | 7 | 0 | 0 | 2 | 0 |
| | 9200743 | R | 87 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| | 8800576 | A | 87 | 1 | 2 | 0 | 1 | 6 | 3 | 6 | 5 | 8 | 0 |
| | 8800067 | A | 87 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 |
| | 8800099 | A | 87 | 0 | 0 | 0 | 1 | 5 | 7 | 0 | 0 | 4 | 0 |
| | 8900794 | R | 87 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 |
| | 8800327 | M | 88 | 4 | 2 | 3 | 2 | 2 | 4 | 0 | 1 | 1 | 0 |
| | 9800940 | A | 88 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 0 | 0 |
| | 8800506 | H | 88 | 1 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| | 9301277 | R | 88 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| | 9200848 | R | 88 | 5 | 1 | 4 | 0 | 9 | 7 | 7 | 1 | 4 | 0 |
| | 9000830 | R | 88 | 1 | 0 | 1 | 2 | 3 | 2 | 4 | 0 | 1 | 0 |
| | 8900317 | R | 88 | 0 | 0 | 1 | 0 | 2 | 4 | 0 | 0 | 0 | 0 |
| | 9701267 | A | 88 | 0 | 0 | 0 | 0 | 7 | 3 | 0 | 0 | 0 | 0 |
| | 9700094 | A | 88 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 9200838 | A | 88 | 0 | 0 | 0 | 0 | 4 | 8 | 0 | 1 | 2 | 0 |
| | 9701257 | R | 88 | 2 | 0 | 1 | 0 | 4 | 4 | 0 | 0 | 0 | 0 |
| | 8800494 | A | 88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9601332 | A | 88 | 0 | 0 | 1 | 0 | 13 | 4 | 0 | 1 | 2 | 1 |
| | 7103624 | R | 88 | 0 | 0 | 1 | 0 | 1 | 5 | 0 | 1 | 1 | 0 |
| | 8800547 | H | 88 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 |
| | 8800507 | H | 88 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 |
| | 8900631 | A | 89 | 1 | 0 | 1 | 0 | 12 | 4 | 0 | 0 | 0 | 0 |
| | 8901416 | H | 89 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| | 9801116 | R | 89 | 5 | 8 | 2 | 1 | 12 | 5 | 3 | 0 | 2 | 0 |
| | 9201357 | R | 89 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 9600773 | R | 89 | 1 | 2 | 2 | 0 | 6 | 3 | 0 | 0 | 0 | 0 |
| | 9701303 | M | 89 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8800456 | A | 89 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| | 8800729 | A | 89 | 0 | 0 | 0 | 0 | 7 | 2 | 0 | 0 | 0 | 0 |
| | 8800513 | A | 89 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 8800790 | A | 89 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 |

| | ID | L | Score | gr1 | gr2 | E | C | AB | LTS | RLT | Cuts | Det | Sus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8800521 | A | 89 | 1 | 1 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 |
| | 8800085 | R | 89 | 0 | 0 | 0 | 0 | 9 | 3 | 3 | 2 | 3 | 0 |
| | 9001014 | R | 89 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 |
| | 9800859 | H | 89 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 |
| | 9501088 | H | 89 | 0 | 0 | 0 | 0 | 3 | 6 | 0 | 0 | 1 | 0 |
| | 9301502 | M | 89 | 2 | 5 | 8 | 2 | 7 | 2 | 3 | 12 | 6 | 0 |
| | 9701514 | A | 90 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 8900019 | A | 90 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8800094 | H | 90 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 8700188 | R | 90 | 1 | 3 | 1 | 0 | 10 | 15 | 0 | 1 | 4 | 0 |
| | 8800431 | A | 90 | 0 | 0 | 0 | 1 | 2 | 4 | 0 | 0 | 0 | 0 |
| | 8700628 | A | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9501037 | H | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800140 | H | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9401042 | A | 91 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8800598 | A | 91 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 9500788 | R | 91 | 4 | 1 | 3 | 0 | 4 | 0 | 0 | 2 | 2 | 0 |
| | 8900287 | A | 91 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 |
| | 8800080 | A | 91 | 0 | 1 | 2 | 1 | 5 | 4 | 3 | 0 | 1 | 0 |
| | 8800519 | A | 91 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8800314 | R | 91 | 1 | 0 | 0 | 1 | 1 | 5 | 0 | 0 | 0 | 0 |
| | 8800090 | H | 91 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 |
| | 9500753 | H | 91 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 9601075 | H | 91 | 1 | 0 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| | 8800407 | H | 91 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| | 8801292 | H | 92 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8800072 | R | 92 | 4 | 6 | 3 | 1 | 7 | 7 | 0 | 1 | 3 | 0 |
| | 8800426 | R | 92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800491 | R | 92 | 0 | 0 | 0 | 1 | 3 | 6 | 0 | 0 | 1 | 0 |
| | 9400735 | H | 92 | 0 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 0 | 0 |
| | 8800980 | H | 92 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 |
| | 9700095 | H | 92 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| 75% ↓ | 8800071 | H | 93 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 1 | 0 |
| | 8800236 | H | 93 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| | 8800445 | H | 93 | 0 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 1 | 0 |
| | 9000755 | H | 93 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800835 | R | 93 | 2 | 0 | 3 | 1 | 3 | 3 | 7 | 1 | 6 | 0 |
| | 8800416 | A | 93 | 0 | 0 | 0 | 0 | 4 | 5 | 0 | 0 | 0 | 0 |
| | 8801251 | R | 93 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 9301085 | R | 93 | 0 | 1 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 |
| | 9101041 | H | 93 | 1 | 0 | 1 | 0 | 14 | 5 | 0 | 0 | 1 | 0 |
| | 9300786 | H | 93 | 0 | 1 | 1 | 0 | 7 | 3 | 0 | 0 | 0 | 0 |
| | 8700186 | M | 94 | 4 | 1 | 1 | 0 | 20 | 1 | 0 | 0 | 0 | 0 |
| | 9301496 | A | 94 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 |
| | 9700945 | H | 94 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 9701362 | R | 94 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 1 | 0 |
| | 9700773 | H | 94 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| | 9400982 | A | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9701405 | A | 94 | 0 | 0 | 0 | 0 | 11 | 1 | 0 | 0 | 0 | 0 |
| | 8800299 | A | 95 | 0 | 1 | 2 | 1 | 7 | 5 | 0 | 1 | 3 | 0 |
| | 8800331 | A | 95 | 0 | 0 | 0 | 0 | 8 | 3 | 0 | 0 | 3 | 0 |
| | 8800516 | R | 95 | 0 | 2 | 4 | 4 | 9 | 11 | 0 | 8 | 7 | 2 |
| | 8900826 | M | 95 | 0 | 1 | 1 | 2 | 4 | 14 | 0 | 6 | 10 | 2 |
| | 9201120 | A | 95 | 0 | 0 | 3 | 0 | 5 | 8 | 0 | 0 | 2 | 0 |
| | 9400948 | A | 95 | 1 | 3 | 0 | 0 | 4 | 5 | 0 | 0 | 0 | 0 |

| | ID | L | Score | gr1 | gr2 | E | C | AB | LTS | RLT | Cuts | Det | Sus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8800394 | A | 95 | 0 | 0 | 1 | 0 | 4 | 2 | 0 | 0 | 0 | 0 |
| | 8900870 | A | 95 | 1 | 2 | 0 | 0 | 6 | 5 | 0 | 0 | 1 | 0 |
| | 9201272 | R | 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9501042 | A | 96 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 9200739 | A | 96 | 0 | 0 | 0 | 1 | 17 | 5 | 0 | 1 | 1 | 0 |
| | 8900661 | A | 96 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 |
| | 9800690 | H | 96 | 0 | 0 | 0 | 0 | 9 | 3 | 0 | 0 | 0 | 0 |
| | 9500765 | A | 96 | 0 | 0 | 0 | 1 | 4 | 2 | 0 | 0 | 0 | 0 |
| | 8800402 | R | 96 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 |
| | 9500961 | A | 96 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 |
| | 8800485 | A | 96 | 0 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 0 | 1 |
| | 8700514 | R | 96 | 2 | 5 | 2 | 0 | 10 | 1 | 0 | 1 | 1 | 3 |
| | 8800624 | A | 97 | 0 | 0 | 0 | 0 | 10 | 2 | 0 | 0 | 0 | 0 |
| | 9800878 | H | 97 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 9700386 | A | 97 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| | 8800470 | A | 97 | 0 | 0 | 0 | 0 | 5 | 3 | 0 | 0 | 0 | 0 |
| | 8901441 | A | 97 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| | 8900677 | R | 97 | 0 | 0 | 1 | 0 | 4 | 5 | 0 | 0 | 1 | 0 |
| | 8700425 | R | 97 | 0 | 0 | 0 | 0 | 6 | 3 | 0 | 0 | 0 | 0 |
| | 9800883 | R | 97 | 0 | 0 | 1 | 0 | 4 | 4 | 0 | 0 | 0 | 0 |
| | 9800959 | R | 97 | 4 | 2 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| | 9200173 | H | 98 | 0 | 0 | 0 | 0 | 12 | 4 | 0 | 0 | 0 | 0 |
| | 9601053 | A | 98 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9700098 | A | 98 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 |
| | 8800625 | A | 98 | 1 | 0 | 0 | 0 | 6 | 5 | 0 | 1 | 1 | 0 |
| | 9500817 | A | 98 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 9201009 | A | 98 | 2 | 2 | 1 | 0 | 9 | 2 | 0 | 0 | 0 | 0 |
| | 9601284 | R | 98 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 |
| | 8800275 | A | 99 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 9501306 | A | 99 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 8900752 | A | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9800958 | A | 99 | 0 | 1 | 1 | 0 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 8800497 | A | 99 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 8800430 | A | 99 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 1 | 1 | 0 |
| | 8801110 | R | 99 | 0 | 0 | 0 | 1 | 3 | 3 | 0 | 0 | 0 | 0 |
| | 9200791 | H | 99 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 8800511 | A | 100 | 0 | 0 | 0 | 0 | 5 | 1 | 5 | 0 | 1 | 0 |
| | 9500787 | H | 100 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 |
| | 9400748 | H | 100 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 9601215 | R | 100 | 0 | 1 | 2 | 0 | 3 | 4 | 0 | 0 | 0 | 0 |
| | 8701392 | R | 100 | 0 | 1 | 1 | 1 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 8901490 | H | 100 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 9500763 | H | 100 | 0 | 0 | 0 | 0 | 4 | 5 | 0 | 3 | 4 | 1 |
| | 8800524 | A | 101 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 9100696 | A | 101 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 0 |
| | 8800100 | A | 101 | 0 | 2 | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 0 |
| | 8800248 | A | 101 | 2 | 3 | 1 | 1 | 1 | 2 | 3 | 0 | 1 | 0 |
| | 9700695 | A | 101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800096 | H | 101 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| | 9700184 | A | 102 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 |
| | 9400684 | A | 102 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 8900886 | A | 102 | 2 | 0 | 2 | 0 | 6 | 1 | 0 | 0 | 0 | 0 |
| | 8800422 | R | 102 | 0 | 1 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 |
| | 9300898 | M | 102 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 |
| | 8800223 | A | 102 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0 | 0 | 0 |

| | ID | L | Score | gr1 | gr2 | E | C | AB | LTS | RLT | Cuts | Det | Sus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8800261 | A | 102 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 9700997 | H | 102 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| | 8800070 | H | 103 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| | 9700734 | A | 103 | 0 | 1 | 0 | 0 | 7 | 3 | 0 | 0 | 0 | 0 |
| | 9101496 | H | 104 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9700956 | A | 104 | 2 | 1 | 2 | 0 | 6 | 6 | 0 | 0 | 1 | 0 |
| | 8800298 | A | 104 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800442 | A | 105 | 0 | 0 | 0 | 0 | 12 | 4 | 0 | 0 | 0 | 0 |
| | 9301491 | A | 105 | 0 | 0 | 0 | 0 | 5 | 7 | 0 | 0 | 2 | 0 |
| | 9301146 | H | 105 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| | 9500870 | A | 106 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| | 9700840 | H | 106 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 8800311 | R | 106 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | 8800412 | H | 106 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8800395 | H | 106 | 1 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| | 8800490 | A | 107 | 1 | 0 | 1 | 1 | 7 | 1 | 0 | 2 | 1 | 0 |
| | 8700298 | R | 107 | 2 | 0 | 0 | 1 | 2 | 1 | 0 | 3 | 5 | 0 |
| | 8800415 | A | 107 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| | 9700780 | R | 108 | 0 | 2 | 2 | 1 | 5 | 2 | 0 | 0 | 0 | 0 |
| | 9001337 | H | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7103305 | A | 109 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 9700096 | H | 109 | 0 | 0 | 0 | 0 | 9 | 1 | 0 | 0 | 0 | 0 |
| | 8800498 | H | 109 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8800234 | H | 110 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 |
| | 8901095 | M | 111 | 5 | 13 | 8 | 5 | 13 | 8 | 0 | 7 | 10 | 0 |
| | 9700093 | H | 112 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| | 9200902 | H | 113 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 |
| | 9301210 | A | 113 | 0 | 0 | 0 | 0 | 13 | 3 | 1 | 0 | 1 | 0 |
| | 8800398 | M | 114 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 |
| | 9400863 | H | 117 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 9701450 | ESL | 117 | 3 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| | 8800463 | A | 118 | 3 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| | 8800520 | A | 119 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 9801040 | R | 120 | 1 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| | 8900830 | R | 122 | 0 | 0 | 0 | 0 | 6 | 3 | 0 | 0 | 0 | 0 |

# Appendix G

## Syntax

```
recode q2 (1=5)(2=4)(4=2)(5=1).
recode q7 (1=5)(2=4)(4=2)(5=1).
recode q8 (1=5)(2=4)(4=2)(5=1).
recode q11 (1=5)(2=4)(4=2)(5=1).
recode q12 (1=5)(2=4)(4=2)(5=1).
recode q15 (1=5)(2=4)(4=2)(5=1).
recode q16 (1=5)(2=4)(4=2)(5=1).
recode q18 (1=5)(2=4)(4=2)(5=1).
recode q19 (1=5)(2=4)(4=2)(5=1).
recode q21 (1=5)(2=4)(4=2)(5=1).
recode q22 (1=5)(2=4)(4=2)(5=1).
recode q23 (1=5)(2=4)(4=2)(5=1).
recode q24 (1=5)(2=4)(4=2)(5=1).
recode q26 (1=5)(2=4)(4=2)(5=1).
compute
score=(Q1+Q2+Q3+Q4+Q5+Q6+Q7+Q8+Q9+Q10+Q11+Q12+Q13+Q14+Q15+Q16+Q17+Q18+Q19+Q20+Q21+Q22+Q23+Q2
4+Q25+Q26+Q27).
compute SAT=(Q24+Q19+Q11+Q7+Q3).
compute COM=(Q25+Q27+Q1+Q5+Q9+Q17+Q20+Q13+Q22+Q23+Q15).
compute TCH=(Q2+Q16+Q18+Q21+Q4+Q14+Q8+Q12+Q26+Q10+Q6).
value label Q1 1 'all' 2 'most' 3 'about half' 4 'one or two' 5 'none'.
value label Q2 1 'none' 2 'one or two' 3 'about half' 4 'most' 5 'all'.
value label Q3 1 'always' 2 'often' 3 'sometimes' 4 'seldom' 5 'never'.
value label Q4 1 'always' 2 'often' 3 'sometimes' 4 'seldom' 5 'never'.
value label Q5 1 'always' 2 'often' 3 'sometimes' 4 'seldom' 5 'never'.
value label Q6 1 'all' 2 'most' 3 'about half' 4 'one or two' 5 'none'.
value label Q7 1 'never' 2 'seldom' 3 'sometimes' 4 'often' 5 'all'.
value label Q8 1 'never' 2 'seldom' 3 'sometimes' 4 'often' 5 'always'.
value label Q9 1 'all' 2 'most' 3 'about half' 4 'one or two' 5 'none'.
value label Q10 1 'all' 2 'most' 3 'about half' 4 'one or two' 5 'never'.
value label Q11 1 'never' 2 'seldom' 3 'sometimes' 4 'often' 5 'always'.
value label Q12 1 'never' 2 'seldom' 3 'sometimes' 4 'often' 5 'always'.
value label Q13 1 'always' 2 'often' 3 'sometimes' 4 'seldom' 5 'never'.
value label Q14 1 'always' 2 'often' 3 'sometimes' 4 'seldom' 5 'never'.
value label Q15 1 'none' 2 'one or two' 3 'about half' 4 'most' 5 'all'.
value label Q16 1 'far below' 2 'below' 3 'average' 4 'above' 5 'far above'.
value label Q17 1 'never' 2 'hardly ever' 3 'sometimes' 4 'quite often' 5 'every day'.
value label Q18 1 'none' 2 'one or two' 3 'half' 4 'most' 5 'all'.
value label Q19 1 'enemies' 2 'strangers' 3 'distant relatives' 4 'friends' 5 'good friends'.
value label Q20 1 'not at all important' 2 'not too important' 3 'somewhat important' 4 'pretty important' 5 'very important'.
value label Q21 1 'two different worlds' 2 'same solar system' 3 'same planet' 4 'same country' 5 'same wave length'.
value label Q22 1 'trash' 2 'dull stuff' 3 'OK' 4 'good stuff' 5 'great stuff'.
value label Q23 1 'none' 2 'fewer than half' 3 'about half' 4 'more than half' 5 'all'.
value label Q24 1 'never' 2 'seldom' 3 'sometimes' 4 'often' 5 'always'.
value label Q25 1 'always' 2 'often' 3 'sometimes' 4 'seldom' 5 'never'.
value label Q26 1 'never' 2 'seldom' 3 'sometimes' 4 'often' 5 'always'.
value label Q27 1 'always' 2 'often' 3 'sometimes' 4 'seldom' 5 'never'.
compute gr1x=(gr1+1).
compute gr2x=(gr2+1).
compute effortx=(effort+1).
compute conductx=(conduct+1).
compute absencex=(absence+1).
compute ltschx=(ltsch+1).
compute ltclrepx=(ltclrep+1).
compute cutsx=(cuts+1).
compute detx=(det+1).
compute suspenx=(suspen+1).
compute apx=(ap+1).
compute vpx=(vp+1).
compute compscor=(gr1x+gr2x+effortx+conductx+ltclrepx+cutsx+detx+suspenx+absencex+ltschx).
compute comp=(gr1+gr2+effort+conduct+ltclrep+cuts+det+suspen+absence+ltsch).
if (score lt 68)fail=1.
if (score gt 67)fail=2.
if (score lt 65)faila=1.
if (score gt 64)faila=2.
if (score lt 65)failb=1.
if (score gt 96)failb=3.
if (score lt 76)failc=1.
if (score gt 75)failc=2.
compute faild=score.
recode Q32 (1=1)(2=5)(3=5)(4=1)(5=1).
recode Q34 (1=5)(2=4)(3=3)(4=2)(5=1).
recode Q35 (1=1)(2=1)(3=5)(4=5)(5=5)(6=5).
recode Q40 (1=5)(2=4)(3=3)(4=2)(5=1).
recode Q46 (1=5)(2=3)(3=1)(4=1)(5=1).
```

```
recode Q51 (1=5)(2=3)(3=1)(4=1)(5=1).
recode Q53 (1=1)(2=1)(3=3)(4=5)(5=1).
recode Q54 (1=5)(2=3)(3=1)(4=1)(5=1).
recode Q57 (1=5)(2=4)(3=3)(4=2)(5=1).
recode Q59 (1=5)(2=4)(3=3)(4=2)(5=1).
compute litscore=(Q32+Q34+Q35+Q40+Q46+Q49+Q51+Q52+Q54+Q57).
compute scoutlyr=score.
if (score lt 73)scoutlyr=1.
if (score gt 92)scoutlyr=3.
compute csoutlyr=compscor.
if (compscor lt 26)csoutlyr=1.
if (compscor gt 25)csoutlyr=2.
recode Q46 (3=5).
recode Q51 (3=5).
if (score lt 73)faile=1.
if (score gt 92)faile=3.
faile=group.
recode Q49 (1=1)(2=1)(3=5)(4=5)(5=5).
recode Q52 (1=1)(2=1)(3=3)(4=5)(5=5).
recode Q57 (1=1)(2=1)(3=3)(4=5)(5=5).
recode Q34 (1=1)(2=1)(3=3)(4=5)(5=5).
recode Q40 (1=1)(2=1)(3=3)(4=5)(5=5).
```

Appendix H

Correlations on Paired Items

# Correlations

**Correlations**

| | | | Q59 1 | Q60 5 | Q58 5 | Q25 5 | Q57 1 | Q2 1 |
|---|---|---|---|---|---|---|---|---|
| Q59 | 1 | Pearson Correlation | 1.000 | .707** | .447** | .382** | .550** | .248** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | | N | 419 | 418 | 416 | 419 | 419 | 419 |
| Q60 | 5 | Pearson Correlation | .707** | 1.000 | .468** | .348** | .510** | .219** |
| | | Sig. (2-tailed) | .000 | . | .000 | .000 | .000 | .000 |
| | | N | 418 | 418 | 415 | 418 | 418 | 418 |
| Q58 | 5 | Pearson Correlation | .447** | .468** | 1.000 | .272** | .468** | .245** |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 | .000 | .000 |
| | | N | 416 | 415 | 416 | 416 | 416 | 416 |
| Q25 | 5 | Pearson Correlation | .382** | .348** | .272** | 1.000 | .350** | .123* |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . | .000 | .012 |
| | | N | 419 | 418 | 416 | 420 | 419 | 420 |
| Q57 | 1 | Pearson Correlation | .550** | .510** | .468** | .350** | 1.000 | .345** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . | .000 |
| | | N | 419 | 418 | 416 | 419 | 419 | 419 |
| Q2 | 1 | Pearson Correlation | .248** | .219** | .245** | .123* | .345** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .012 | .000 | . |
| | | N | 419 | 418 | 416 | 420 | 419 | 420 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix I

Recoded QSL Survey

Student Identification Number _____

Student's name _____ Room _____

Period _____

# QSL

## THE QUALITY OF SCHOOL LIFE SCALE

(Recoded and applicable to data analysis steps 2, 3, and 4)

Joyce L. Epstein
James M. McPartland
The Johns Hopkins University

To the students:

The questions in this booklet will help you and others who seek to improve schools to understand how you feel about school and the things that happen in school. Read each question carefully. Then circle **one** answer that is closest to what you think. You do not have to circle the whole answer, just the number next to it. Remember, **this is not a test**. There are **no** right or wrong answers. Please work on your own. It is important to tell us what **you** really think. Please do not leave any blanks. If no answer is *exactly* what you think, choose the one that is *closest* to what you think.

Student Identification Number _____

## Part I: The Quality of School Life Scale

Read each statement then circle the one answer that tells best what **you** think.

1. **In class, I often count the minutes till it ends.**
    1. In all my classes
    2. In most of my classes
    3. In about half of my classes
    4. In one or two of my classes
    5. In none of my classes

2. **I wish I could have the same teachers next year.**
    5. All of them
    4. Most of them
    3. About half of them
    2. One or two of them
    1. None of them

3. **Most of the time I do not want to go to school.**
    1. I always feel this way
    2. I often feel this way
    3. I sometimes feel this way
    4. I seldom feel this way
    5. I never feel this way

4. **Most of my teachers want me to do things their way and not my own way.**
    1. I always feel this way
    2. I often feel this way
    3. I sometimes feel this way
    4. I seldom feel this way
    5. I never feel this way

5. **I hardly ever do anything very exciting in class.**
    1. I always feel this way
    2. I often feel this way
    3. I sometimes feel this way
    4. I seldom feel this way
    5. I never feel this way

Student Identification Number _____

**6. My teachers often act as if they are always right and I am wrong.**

1. All my teachers act this way
2. Most of my teachers act this way
3. About half of my teachers act this way
4. One or two of my teachers act this way
5. None of my teachers act this way

**7. I am very happy when I am in school.**

5. All the time
4. Often
3. Sometimes
2. Seldom
1. Never

**8. Most of my teachers really listen to what I have to say.**

5. I always feel this way
4. I often feel this way
3. I sometimes feel this way
2. I seldom feel this way
1. I never feel this way

**9. I daydream a lot in class.**

1. In all my classes
2. In most of my classes
3. In about half of my classes
4. In one or two of my classes
5. In none of my classes

**10. Certain students in my classes are favored by my teachers more than the rest.**

1. This happens in all my classes
2. This happens in most of my classes
3. This happens in about half of my classes
4. This happens in one or two of my classes
5. This never happens in my classes

**11. I like school very much.**

5. I always feel this way
4. I often feel this way
3. I sometimes feel this way
2. I seldom feel this way
1. I never feel this way

Student Identification Number _____

**12. Teachers here have a way with students that makes me like them.**

5. I always feel this way
4. I often feel this way
3. I sometimes feel this way
2. I seldom feel this way
1. I never feel this way

**13. Most of the topics we study in class can't end soon enough to suit me.**

1. I always feel this way
2. I often feel this way
3. I sometimes feel this way
4. I seldom feel this way
5. I never feel this way

**14. Most of my teachers do not like me to ask a lot of questions during a lesson.**

1. I always feel this way
2. I often feel this way
3. I sometimes feel this way
4. I seldom feel this way
5. I never feel this way

**15. This semester I am eager to get to . . .**

5. All my classes
4. Most of my classes
3. About half of my classes
2. One or two of my classes
1. None of my classes

**16. How would you rate the ability of most of <u>your</u> teachers compared to teachers in other schools at your grade level? My teachers are . . .**

5. Far above average
4. Above average
3. Average
2. Below average
1. Far below average

**17. In my classes I get so interested in an assignment or project that I don't want to stop work.**

1. This never happens
2. This hardly ever happens
3. This sometimes happens
4. This happens quite often
5. This happens every day

Student Identification Number _____

**18. Thinking of my teachers this semester, I really like . . .**

5. All of them
4. Most of them
3. Half of them
2. One or two of them
1. None of them

**19. The school and I are like . . .**

5. Good friends
4. Friends
3. Distant relatives
2. Strangers
1. Enemies

**20. The work I do in most classes is . . .**

1. Not at all important to me
2. Not too important to me
3. Somewhat important to me
4. Pretty important to me
5. Very important to me

**21. This semester my teachers and I are . . .**

5. On the same wave length
4. In the same country
3. On the same planet
2. Somewhere in the same solar system
1. In two different worlds

**22. The things I get to work on in most of my classes are . . .**

5. Great stuff - really interesting to me
4. Good stuff - pretty interesting to me
3. OK - school work is school work
2. Dull stuff - not very interesting to me
1. Trash - a total waste of time

**23. If you could choose to take any courses at all, how many of your <u>present</u> courses would you take?**

5. All of them
4. More than half of them
3. About half of them
2. Fewer than half of them
1. None of them

Student Identification Number _____

**24. I enjoy the work I do in class.**

5. Always
4. Often
3. Sometimes
2. Seldom
1. Never

**25. Work in class is just busy work and a waste of time.**

1. Always
2. Often
3. Sometimes
4. Seldom
5. Never

**26. I feel I can go to my teacher with the things that are on my mind.**

5. Always
4. Often
3. Sometimes
2. Seldom
1. Never

**27. School work is dull and boring for me.**

1. Always
2. Often
3. Sometimes
4. Seldom
5. Never

Please turn to the next page . . .

Student Identification Number _____

## Part II: Please tell us about you.

28. Circle: Male (1) Female (2)

29. Circle or fill-in the one that best describes you:
    2. African-American
    2. Asian
    1. Caucasian (White)
    2. Hispanic
    2. Native-American
    2. Pacific Islander
    2. Alaskan-Native
    2. Other _____
    2. Dual Heritage, but I identify with _____
    2. Indian

30. Circle the one that best describes you:
    1. I take mostly Honors classes
    2. I take mostly Advanced Placement classes
    3. I take mostly Accelerated classes
    4. I take mostly Regular classes
    5. I take mostly Modified classes

31. Circle the one that bests describes your grades on your final report card last school year:
    1. I got mostly A's and some B's
    2. I got mostly B's and some C's
    3. I got mostly C's and some D's
    4. I got mostly D's and some E's or F's
    5. I got mostly E's and F's

32. Circle the one that best describes your parents' discipline style:
    1. Authoritarian - bossy - too strict - unfair in expectations and demands - won't bend
    5. Authoritative - firm but fair - will listen to my point of view - flexible and reasonable
    5. A mixture of styles
    1. Permissive - cares but is very easy going - few rules if any - very open minded
    1. No discipline - doesn't care what I do - uninvolved with what I do

33. Circle the one that best describes your household:
    1. Two-parent/guardian family; one parent works outside the home
    2. Two-parent/guardian family; two parents work outside the home
    3. One-parent/guardian family; parent works inside or outside the home
    4. Foster care family; one guardian works outside the home
    5. Foster care family; two guardians work outside the home

Student Identification Number _____

34. Circle the one that best describes how much you participate in family decisions:
    5. High level of participation
    5. A good level of participation
    3. An average level of participation
    1. A low level of participation
    1. No participation

35. Circle the one that best describes your situation:
    1. I have a part-time job, I work more than 15 hours a week, and I have a lot of regular chores to do in my home.
    1. I have a part-time job, I work more than 15 hours a week, but I do not have a lot of regular chores to do in my home.
    5. I have a part-time job, I work less than 15 hours a week, and I have a lot of regular chores to do in my home.
    5. I have a part-time job, I work less than 15 hours a week, but I do not have a lot of regular chores to do in my home.
    5. I do not have a part-time job, but I do have a lot of regular chores.
    5. I do not have a part-time job and I do not have a lot of regular chores.

36. Circle the one that best describes your school history:
    1. I have always attended Cherry Hill schools.
    2. I entered the Cherry Hill school district midway through elementary school.
    3. I entered the Cherry Hill school district in middle school.
    4. I entered the Cherry Hill school district in 9th grade.
    5. I entered the Cherry Hill school district in 10th grade.

37. Circle the one that best describes your disciplinary record:
    1. I have and will most likely have a clean record.
    2. I hardly ever get in trouble.
    3. I sometimes get in trouble.
    4. I often get in trouble.
    5. I always get in trouble.

38. Circle the one that best describes your behavior in your classes:
    1. I never disrupt my classes.
    2. I seldom disrupt my classes.
    3. I sometimes disrupt my classes.
    4. I often disrupt my classes.
    5. I always disrupt my classes.

Student Identification Number _____

39. Circle the one that best describes your behavior towards other students:
    1. I always try to hurt others.
    2. I often try to hurt others.
    3. I sometimes try to hurt others.
    4. I seldom try to hurt others.
    5. I never try to hurt others.

40. Circle the one that best describes your teachers' grading systems:
    5. All of my teachers grade fairly.
    5. Most of my teachers grade fairly.
    3. About half of my teachers grade fairly.
    1. Only one or two of my teachers grade fairly.
    1. None of my teachers grade fairly.

41. Circle the one that best describes the level of effort you put into school:
    1. No effort
    2. I do what I need to pass.
    3. I do what I need to do to get good grades.
    4. I work hard.
    5. I do my very best.

42. Circle the one that best describes what **you** think about the quality of your school work:
    1. Highest quality
    2. Good quality
    3. Fair quality
    4. Poor quality
    5. No quality

43. Circle the one that best describes the level of your participation in school-sponsored activities:
    1. No participation
    2. Little participation
    3. Average participation
    4. High participation
    5. Highest participation

44. Circle the one that best describes your satisfaction with the types of student activities offered:
    1. Very satisfied
    2. Satisfied
    3. Neither satisfied nor dissatisfied
    4. Dissatisfied
    5. Very dissatisfied

Student Identification Number _____

45. Circle the one that best describes "school spirit" here at school:
    1. Very poor
    2. Poor
    3. Fair
    4. Good
    5. Excellent

46. Circle the one that best describes **your parents'** value on your education:
    5. Most important value
    3. Very important
    1. Somewhat important
    1. Little importance
    1. Couldn't care less

47. Circle the one that best describes **your** value on your education:
    1. My education is my most important value.
    2. My education is a very important value.
    3. Somewhat of an important value
    4. My education is of little importance to me.
    5. I couldn't care less about my education.

48. Circle the one that best describes your potential as a student:
    1. I am learning as much as I can.
    2. I am learning close to my potential.
    3. I am learning about half of what I could learn.
    4. I am learning a little compared to my potential.
    5. I am learning zero compared to my potential.

49. Circle the one that best describes the economic conditions of your home:
    1. Hard times
    1. Low
    5. Average
    5. Good
    5. Excellent

50. Circle the one that best describes the amount of times you think about dropping out of school:
    1. Never
    2. One or two times
    3. Sometimes
    4. Often
    5. All the time

Student Identification Number _____

51. Circle the one that best describes how your friends value school work:
    5. School work is their most important value.
    3. School work is very important to them.
    1. School work is somewhat important to them.
    1. School work is of little importance to them.
    1. My friends couldn't care less about school work.

52. Circle the one that best describes your classes, overall:
    1. Mostly dominance, mistrust, conformity , threats, and punishments
    1. A mix but closer to number 1.
    3. An equal mix of numbers 1 and 5
    5. A mix but closer to number 5
    5. Mostly acceptance, understanding, trust, flexibility, and encouragement

53. Circle the one that best describes your understanding of your parents' expectations of you:
    1. I don't know what my parents expect of me.
    1. My parents expect little from me.
    3. My parents expect an average amount from me.
    5. My parents expect a lot from me.
    1. My parents expect too much from me.

54. Circle the one that best describes your teachers' expectations of you, overall:
    5. My teachers expect excellent work and effort from me.
    3. My teachers expect good work and effort from me.
    1. My teachers expect average work and effort from me.
    1. My teachers expect little work and effort from me.
    1. My teachers expect no work or effort from me.

55. Circle the one that best describes how much of your homework you usually do:
    1. None of it
    2. A little of it
    3. Half of it
    4. Most of it
    5. All of it

56. Circle the one that best describes how much you really understand schoolwork, rather than just give the right answers:
    1. I always understand.
    2. I mostly understand.
    3. I understand half the time.
    4. I seldom understand.
    5. I never understand.

Student Identification Number _____

57. Circle the one that best describes how many classes in which you are satisfied with the methods used to teach the course material:
    5. All
    5. Most
    3. About half
    1. Few
    1. None

58. Circle the one that best describes how many of your teachers care if you learn:
    1. None
    2. Few
    3. About half
    4. Most
    5. All

59. Circle the one that best describes how many subjects in which you are "learning a lot" this year:
    5. In all my subjects
    4. In most of my subjects
    3. In about half of my subjects
    2. In one or two of my subjects
    1. In none of my subjects

60. Circle the one that best describes how much you are learning in school, overall:
    1. Nothing
    2. A little
    3. A fair amount
    4. A good amount
    5. A lot

61. Circle the one that best describes how satisfied or dissatisfied you are with the way you are treated by your counselor and the guidance department:
    1. Very satisfied
    2. Satisfied
    3. Neither satisfied nor dissatisfied
    4. Dissatisfied
    5. Very Dissatisfied

62. Circle the one that best describes how satisfied or dissatisfied you are with the way you are treated by the administration:
    1. Very satisfied
    2. Satisfied
    3. Neither satisfied nor dissatisfied
    4. Dissatisfied
    5. Very dissatisfied

Please turn to the next page . . .

Student Identification Number _____

**PART III: Now you may comment in your own words about the quality of life in school:**

Some students say: "Overall, I like school."
Others say: "Overall, I hate school."
How do you feel and why? Write as much or as little as you wish.

63. Overall, I _____school, and this is why:

(continue on back, if necessary)

# Appendix J

## Distributions and Histograms

# Frequencies

**Statistics**

SCORE

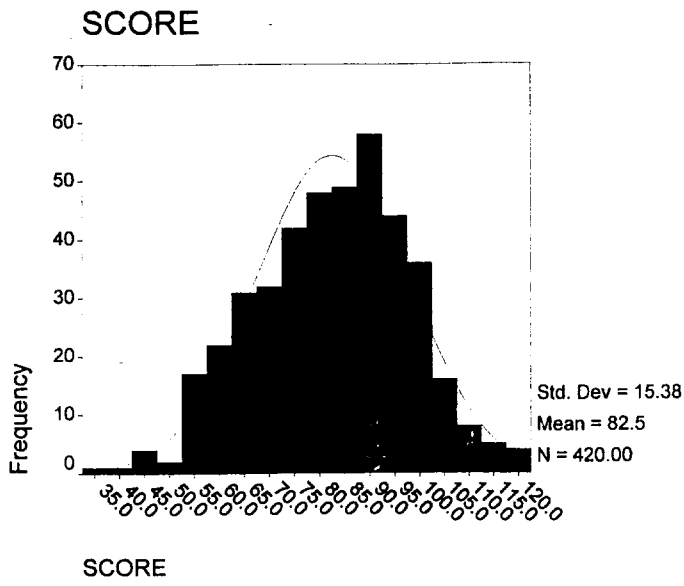
| | | |
|---|---|---|
| N | Valid | 420 |
| | Missing | 0 |
| Mean | | 82.5071 |
| Std. Deviation | | 15.3776 |
| Percentiles | 25 | 72.0000 |
| | 50 | 84.0000 |
| | 75 | 93.0000 |

**SCORE**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 37.00 | 1 | .2 | .2 | .2 |
| | 41.00 | 1 | .2 | .2 | .5 |
| | 43.00 | 2 | .5 | .5 | 1.0 |
| | 46.00 | 2 | .5 | .5 | 1.4 |
| | 48.00 | 1 | .2 | .2 | 1.7 |
| | 51.00 | 1 | .2 | .2 | 1.9 |
| | 53.00 | 5 | 1.2 | 1.2 | 3.1 |
| | 54.00 | 3 | .7 | .7 | 3.8 |
| | 55.00 | 3 | .7 | .7 | 4.5 |
| | 56.00 | 3 | .7 | .7 | 5.2 |
| | 57.00 | 3 | .7 | .7 | 6.0 |
| | 58.00 | 3 | .7 | .7 | 6.7 |
| | 59.00 | 2 | .5 | .5 | 7.1 |
| | 60.00 | 5 | 1.2 | 1.2 | 8.3 |
| | 61.00 | 7 | 1.7 | 1.7 | 10.0 |
| | 62.00 | 5 | 1.2 | 1.2 | 11.2 |
| | 63.00 | 5 | 1.2 | 1.2 | 12.4 |
| | 64.00 | 6 | 1.4 | 1.4 | 13.8 |
| | 65.00 | 4 | 1.0 | 1.0 | 14.8 |
| | 66.00 | 6 | 1.4 | 1.4 | 16.2 |
| | 67.00 | 10 | 2.4 | 2.4 | 18.6 |
| | 68.00 | 8 | 1.9 | 1.9 | 20.5 |
| | 69.00 | 5 | 1.2 | 1.2 | 21.7 |
| | 70.00 | 3 | .7 | .7 | 22.4 |
| | 71.00 | 5 | 1.2 | 1.2 | 23.6 |
| | 72.00 | 11 | 2.6 | 2.6 | 26.2 |
| | 73.00 | 9 | 2.1 | 2.1 | 28.3 |
| | 74.00 | 9 | 2.1 | 2.1 | 30.5 |
| | 75.00 | 5 | 1.2 | 1.2 | 31.7 |
| | 76.00 | 8 | 1.9 | 1.9 | 33.6 |
| | 77.00 | 11 | 2.6 | 2.6 | 36.2 |
| | 78.00 | 5 | 1.2 | 1.2 | 37.4 |
| | 79.00 | 14 | 3.3 | 3.3 | 40.7 |
| | 80.00 | 8 | 1.9 | 1.9 | 42.6 |
| | 81.00 | 9 | 2.1 | 2.1 | 44.8 |
| | 82.00 | 12 | 2.9 | 2.9 | 47.6 |
| | 83.00 | 7 | 1.7 | 1.7 | 49.3 |
| | 84.00 | 11 | 2.6 | 2.6 | 51.9 |
| | 85.00 | 9 | 2.1 | 2.1 | 54.0 |
| | 86.00 | 11 | 2.6 | 2.6 | 56.7 |
| | 87.00 | 11 | 2.6 | 2.6 | 59.3 |

**SCORE**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 88.00 | 16 | 3.8 | 3.8 | 63.1 |
| | 89.00 | 16 | 3.8 | 3.8 | 66.9 |
| | 90.00 | 6 | 1.4 | 1.4 | 68.3 |
| | 91.00 | 13 | 3.1 | 3.1 | 71.4 |
| | 92.00 | 7 | 1.7 | 1.7 | 73.1 |
| | 93.00 | 10 | 2.4 | 2.4 | 75.5 |
| | 94.00 | 7 | 1.7 | 1.7 | 77.1 |
| | 95.00 | 9 | 2.1 | 2.1 | 79.3 |
| | 96.00 | 9 | 2.1 | 2.1 | 81.4 |
| | 97.00 | 9 | 2.1 | 2.1 | 83.6 |
| | 98.00 | 7 | 1.7 | 1.7 | 85.2 |
| | 99.00 | 8 | 1.9 | 1.9 | 87.1 |
| | 100.00 | 7 | 1.7 | 1.7 | 88.8 |
| | 101.00 | 6 | 1.4 | 1.4 | 90.2 |
| | 102.00 | 8 | 1.9 | 1.9 | 92.1 |
| | 103.00 | 2 | .5 | .5 | 92.6 |
| | 104.00 | 3 | .7 | .7 | 93.3 |
| | 105.00 | 3 | .7 | .7 | 94.0 |
| | 106.00 | 5 | 1.2 | 1.2 | 95.2 |
| | 107.00 | 3 | .7 | .7 | 96.0 |
| | 108.00 | 2 | .5 | .5 | 96.4 |
| | 109.00 | 3 | .7 | .7 | 97.1 |
| | 110.00 | 1 | .2 | .2 | 97.4 |
| | 111.00 | 1 | .2 | .2 | 97.6 |
| | 112.00 | 1 | .2 | .2 | 97.9 |
| | 113.00 | 2 | .5 | .5 | 98.3 |
| | 114.00 | 1 | .2 | .2 | 98.6 |
| | 117.00 | 2 | .5 | .5 | 99.0 |
| | 118.00 | 1 | .2 | .2 | 99.3 |
| | 119.00 | 1 | .2 | .2 | 99.5 |
| | 120.00 | 1 | .2 | .2 | 99.8 |
| | 122.00 | 1 | .2 | .2 | 100.0 |
| | Total | 420 | 100.0 | 100.0 | |


SCORE
70
60
50
40
30
20
10
0
Frequency
Std. Dev = 15.38
Mean = 82.5
N = 420.00
35.0
40.0
45.0
50.0
55.0
60.0
65.0
70.0
75.0
80.0
85.0
90.0
95.0
100.0
105.0
110.0
115.0
120.0
SCORE

# Frequencies

**Statistics**

| | | SAT | COM | TCH |
|---|---|---|---|---|
| N | Valid | 420 | 420 | 420 |
| | Missing | 0 | 0 | 0 |
| Mean | | 14.4048 | 32.4548 | 35.6476 |
| Std. Deviation | | 3.6958 | 7.3065 | 6.3880 |
| Percentiles | 25 | 12.0000 | 27.0000 | 31.0000 |
| | 50 | 15.0000 | 33.0000 | 36.0000 |
| | 75 | 17.0000 | 38.0000 | 40.0000 |

# Frequency Table

**SAT**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 5.00 | 3 | .7 | .7 | .7 |
| | 6.00 | 6 | 1.4 | 1.4 | 2.1 |
| | 7.00 | 9 | 2.1 | 2.1 | 4.3 |
| | 8.00 | 10 | 2.4 | 2.4 | 6.7 |
| | 9.00 | 15 | 3.6 | 3.6 | 10.2 |
| | 10.00 | 25 | 6.0 | 6.0 | 16.2 |
| | 11.00 | 27 | 6.4 | 6.4 | 22.6 |
| | 12.00 | 32 | 7.6 | 7.6 | 30.2 |
| | 13.00 | 34 | 8.1 | 8.1 | 38.3 |
| | 14.00 | 34 | 8.1 | 8.1 | 46.4 |
| | 15.00 | 50 | 11.9 | 11.9 | 58.3 |
| | 16.00 | 48 | 11.4 | 11.4 | 69.8 |
| | 17.00 | 42 | 10.0 | 10.0 | 79.8 |
| | 18.00 | 32 | 7.6 | 7.6 | 87.4 |
| | 19.00 | 24 | 5.7 | 5.7 | 93.1 |
| | 20.00 | 16 | 3.8 | 3.8 | 96.9 |
| | 21.00 | 4 | 1.0 | 1.0 | 97.9 |
| | 22.00 | 4 | 1.0 | 1.0 | 98.8 |
| | 23.00 | 4 | 1.0 | 1.0 | 99.8 |
| | 24.00 | 1 | .2 | .2 | 100.0 |
| | Total | 420 | 100.0 | 100.0 | |

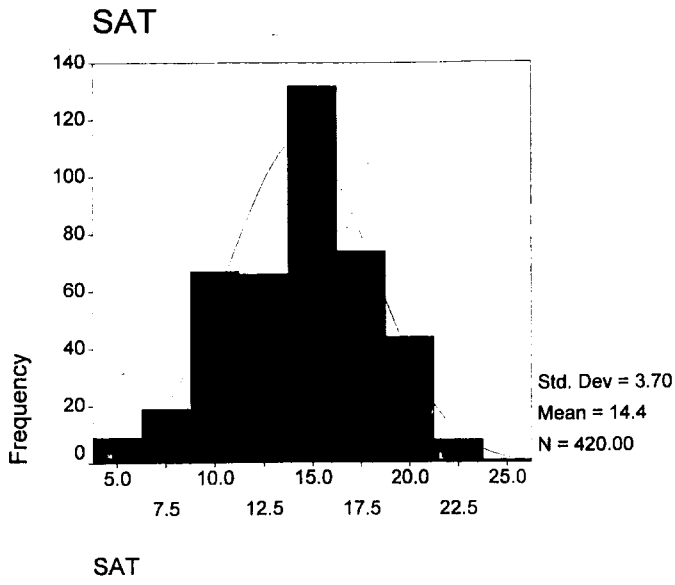
**COM**

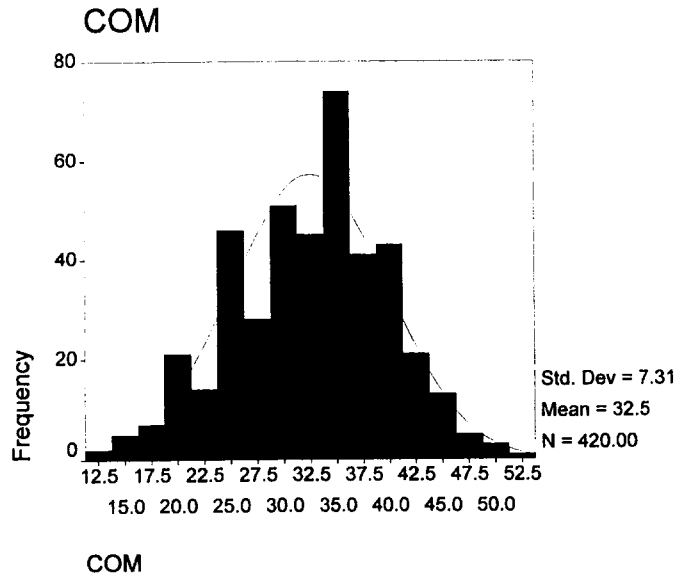
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 12.00 | 1 | .2 | .2 | .2 |
| | 13.00 | 1 | .2 | .2 | .5 |
| | 14.00 | 2 | .5 | .5 | 1.0 |
| | 15.00 | 1 | .2 | .2 | 1.2 |
| | 16.00 | 2 | .5 | .5 | 1.7 |
| | 17.00 | 4 | 1.0 | 1.0 | 2.6 |
| | 18.00 | 3 | .7 | .7 | 3.3 |
| | 19.00 | 2 | .5 | .5 | 3.8 |
| | 20.00 | 10 | 2.4 | 2.4 | 6.2 |
| | 21.00 | 9 | 2.1 | 2.1 | 8.3 |
| | 22.00 | 6 | 1.4 | 1.4 | 9.8 |
| | 23.00 | 8 | 1.9 | 1.9 | 11.7 |
| | 24.00 | 11 | 2.6 | 2.6 | 14.3 |
| | 25.00 | 20 | 4.8 | 4.8 | 19.0 |
| | 26.00 | 15 | 3.6 | 3.6 | 22.6 |
| | 27.00 | 15 | 3.6 | 3.6 | 26.2 |
| | 28.00 | 13 | 3.1 | 3.1 | 29.3 |
| | 29.00 | 14 | 3.3 | 3.3 | 32.6 |
| | 30.00 | 19 | 4.5 | 4.5 | 37.1 |
| | 31.00 | 18 | 4.3 | 4.3 | 41.4 |
| | 32.00 | 20 | 4.8 | 4.8 | 46.2 |
| | 33.00 | 25 | 6.0 | 6.0 | 52.1 |
| | 34.00 | 34 | 8.1 | 8.1 | 60.2 |
| | 35.00 | 19 | 4.5 | 4.5 | 64.8 |
| | 36.00 | 21 | 5.0 | 5.0 | 69.8 |
| | 37.00 | 20 | 4.8 | 4.8 | 74.5 |
| | 38.00 | 21 | 5.0 | 5.0 | 79.5 |
| | 39.00 | 13 | 3.1 | 3.1 | 82.6 |
| | 40.00 | 21 | 5.0 | 5.0 | 87.6 |
| | 41.00 | 9 | 2.1 | 2.1 | 89.8 |
| | 42.00 | 11 | 2.6 | 2.6 | 92.4 |
| | 43.00 | 10 | 2.4 | 2.4 | 94.8 |
| | 44.00 | 4 | 1.0 | 1.0 | 95.7 |
| | 45.00 | 7 | 1.7 | 1.7 | 97.4 |
| | 46.00 | 2 | .5 | .5 | 97.9 |
| | 47.00 | 2 | .5 | .5 | 98.3 |
| | 48.00 | 3 | .7 | .7 | 99.0 |
| | 49.00 | 2 | .5 | .5 | 99.5 |
| | 50.00 | 1 | .2 | .2 | 99.8 |
| | 52.00 | 1 | .2 | .2 | 100.0 |
| | Total | 420 | 100.0 | 100.0 | |

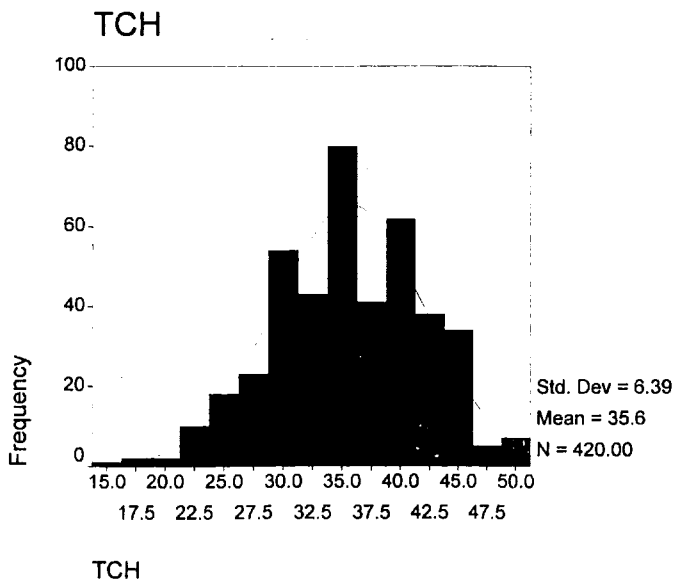
TCH

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 15.00 | 1 | .2 | .2 | .2 |
| | 18.00 | 2 | .5 | .5 | .7 |
| | 21.00 | 2 | .5 | .5 | 1.2 |
| | 22.00 | 7 | 1.7 | 1.7 | 2.9 |
| | 23.00 | 3 | .7 | .7 | 3.6 |
| | 24.00 | 5 | 1.2 | 1.2 | 4.8 |
| | 25.00 | 7 | 1.7 | 1.7 | 6.4 |
| | 26.00 | 6 | 1.4 | 1.4 | 7.9 |
| | 27.00 | 3 | .7 | .7 | 8.6 |
| | 28.00 | 20 | 4.8 | 4.8 | 13.3 |
| | 29.00 | 15 | 3.6 | 3.6 | 16.9 |
| | 30.00 | 19 | 4.5 | 4.5 | 21.4 |
| | 31.00 | 20 | 4.8 | 4.8 | 26.2 |
| | 32.00 | 22 | 5.2 | 5.2 | 31.4 |
| | 33.00 | 21 | 5.0 | 5.0 | 36.4 |
| | 34.00 | 30 | 7.1 | 7.1 | 43.6 |
| | 35.00 | 24 | 5.7 | 5.7 | 49.3 |
| | 36.00 | 26 | 6.2 | 6.2 | 55.5 |
| | 37.00 | 17 | 4.0 | 4.0 | 59.5 |
| | 38.00 | 24 | 5.7 | 5.7 | 65.2 |
| | 39.00 | 19 | 4.5 | 4.5 | 69.8 |
| | 40.00 | 26 | 6.2 | 6.2 | 76.0 |
| | 41.00 | 17 | 4.0 | 4.0 | 80.0 |
| | 42.00 | 21 | 5.0 | 5.0 | 85.0 |
| | 43.00 | 17 | 4.0 | 4.0 | 89.0 |
| | 44.00 | 11 | 2.6 | 2.6 | 91.7 |
| | 45.00 | 12 | 2.9 | 2.9 | 94.5 |
| | 46.00 | 11 | 2.6 | 2.6 | 97.1 |
| | 47.00 | 4 | 1.0 | 1.0 | 98.1 |
| | 48.00 | 1 | .2 | .2 | 98.3 |
| | 49.00 | 3 | .7 | .7 | 99.0 |
| | 50.00 | 3 | .7 | .7 | 99.8 |
| | 51.00 | 1 | .2 | .2 | 100.0 |
| | Total | 420 | 100.0 | 100.0 | |

## Histogram


SAT
140
120
100
80
60
40
20
0
Frequency
5.0
7.5
10.0
12.5
15.0
17.5
20.0
22.5
25.0
Std. Dev = 3.70
Mean = 14.4
N = 420.00
SAT


COM
80
60
40
20
0
Frequency
12.5
15.0
17.5
20.0
22.5
25.0
27.5
30.0
32.5
35.0
37.5
40.0
42.5
45.0
47.5
50.0
52.5
Std. Dev = 7.31
Mean = 32.5
N = 420.00
COM


TCH
100
80
60
40
20
0
Frequency
Std. Dev = 6.39
Mean = 35.6
N = 420.00
15.0
17.5
20.0
22.5
25.0
27.5
30.0
32.5
35.0
37.5
40.0
42.5
45.0
47.5
50.0
TCH

Appendix K

Case Summaries by Student Identification Number

# Summarize

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| ID | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| SCORE | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| SAT | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| COM | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| TCH | 420 | 100.0% | 0 | .0% | 420 | 100.0% |

**Case Summaries**

| | ID | GROUP | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|---|
| 1 | 8800403.0 | 1.00 | 37.00 | 5.00 | 14.00 | 18.00 |
| 2 | 9300689.0 | 1.00 | 41.00 | 11.00 | 12.00 | 18.00 |
| 3 | 9701094.0 | 1.00 | 43.00 | 6.00 | 16.00 | 21.00 |
| 4 | 8800405.0 | 1.00 | 43.00 | 7.00 | 14.00 | 22.00 |
| 5 | 9101056.0 | 1.00 | 46.00 | 7.00 | 17.00 | 22.00 |
| 6 | 8900198.0 | 1.00 | 46.00 | 12.00 | 19.00 | 15.00 |
| 7 | 8800411.0 | 1.00 | 48.00 | 5.00 | 15.00 | 28.00 |
| 8 | 9701153.0 | 1.00 | 51.00 | 8.00 | 20.00 | 23.00 |
| 9 | 8800246.0 | 1.00 | 53.00 | 6.00 | 16.00 | 31.00 |
| 10 | 9701356.0 | 1.00 | 53.00 | 7.00 | 21.00 | 25.00 |
| 11 | 8700325.0 | 1.00 | 53.00 | 11.00 | 13.00 | 29.00 |
| 12 | 8900569.0 | 1.00 | 53.00 | 6.00 | 21.00 | 26.00 |
| 13 | 9700895.0 | 1.00 | 53.00 | 11.00 | 18.00 | 24.00 |
| 14 | 8900196.0 | 1.00 | 54.00 | 9.00 | 17.00 | 28.00 |
| 15 | 9401343.0 | 1.00 | 54.00 | 12.00 | 19.00 | 23.00 |
| 16 | 9401146.0 | 1.00 | 54.00 | 7.00 | 21.00 | 26.00 |
| 17 | 9301127.0 | 1.00 | 55.00 | 11.00 | 20.00 | 24.00 |
| 18 | 8800606.0 | 1.00 | 55.00 | 8.00 | 20.00 | 27.00 |
| 19 | 8800101.0 | 1.00 | 55.00 | 7.00 | 17.00 | 31.00 |
| 20 | 9000785.0 | 1.00 | 56.00 | 6.00 | 17.00 | 33.00 |
| 21 | 9201347.0 | 1.00 | 56.00 | 9.00 | 25.00 | 22.00 |
| 22 | 8800318.0 | 1.00 | 56.00 | 10.00 | 24.00 | 22.00 |
| 23 | 8800308.0 | 1.00 | 57.00 | 8.00 | 23.00 | 26.00 |
| 24 | 8800316.0 | 1.00 | 57.00 | 11.00 | 22.00 | 24.00 |
| 25 | 9001368.0 | 1.00 | 57.00 | 11.00 | 24.00 | 22.00 |
| 26 | 8800477.0 | 1.00 | 58.00 | 9.00 | 21.00 | 28.00 |
| 27 | 9301335.0 | 1.00 | 58.00 | 13.00 | 21.00 | 24.00 |
| 28 | 8800450.0 | 1.00 | 58.00 | 9.00 | 20.00 | 29.00 |
| 29 | 8800619.0 | 1.00 | 59.00 | 7.00 | 24.00 | 28.00 |
| 30 | 8800476.0 | 1.00 | 59.00 | 7.00 | 27.00 | 25.00 |
| 31 | 9201033.0 | 1.00 | 60.00 | 16.00 | 20.00 | 24.00 |
| 32 | 9000889.0 | 1.00 | 60.00 | 10.00 | 21.00 | 29.00 |
| 33 | 9200984.0 | 1.00 | 60.00 | 12.00 | 27.00 | 21.00 |
| 34 | 8800073.0 | 1.00 | 60.00 | 17.00 | 20.00 | 23.00 |
| 35 | 8800336.0 | 1.00 | 60.00 | 8.00 | 22.00 | 30.00 |
| 36 | 8900369.0 | 1.00 | 61.00 | 11.00 | 22.00 | 28.00 |
| 37 | 9501422.0 | 1.00 | 61.00 | 9.00 | 23.00 | 29.00 |
| 38 | 8700888.0 | 1.00 | 61.00 | 9.00 | 20.00 | 32.00 |
| 39 | 8800433.0 | 1.00 | 61.00 | 9.00 | 18.00 | 34.00 |
| 40 | 8800941.0 | 1.00 | 61.00 | 8.00 | 28.00 | 25.00 |
| 41 | 8800324.0 | 1.00 | 61.00 | 11.00 | 25.00 | 25.00 |

**Case Summaries**

| | ID | GROUP | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|---|
| 42 | 8800468.0 | 1.00 | 61.00 | 9.00 | 25.00 | 27.00 |
| 43 | 8800554.0 | 1.00 | 62.00 | 14.00 | 20.00 | 28.00 |
| 44 | 8700208.0 | 1.00 | 62.00 | 16.00 | 18.00 | 28.00 |
| 45 | 9000873.0 | 1.00 | 62.00 | 10.00 | 22.00 | 30.00 |
| 46 | 8900473.0 | 1.00 | 62.00 | 6.00 | 25.00 | 31.00 |
| 47 | 9500790.0 | 1.00 | 62.00 | 10.00 | 21.00 | 31.00 |
| 48 | 9200841.0 | 1.00 | 63.00 | 10.00 | 23.00 | 30.00 |
| 49 | 8800455.0 | 1.00 | 63.00 | 10.00 | 21.00 | 32.00 |
| 50 | 9201386.0 | 1.00 | 63.00 | 11.00 | 24.00 | 28.00 |
| 51 | 8800596.0 | 1.00 | 63.00 | 8.00 | 24.00 | 31.00 |
| 52 | 9201289.0 | 1.00 | 63.00 | 10.00 | 25.00 | 28.00 |
| 53 | 8800093.0 | 1.00 | 64.00 | 10.00 | 26.00 | 28.00 |
| 54 | 8800406.0 | 1.00 | 64.00 | 9.00 | 29.00 | 26.00 |
| 55 | 8901015.0 | 1.00 | 64.00 | 10.00 | 24.00 | 30.00 |
| 56 | 8800551.0 | 1.00 | 64.00 | 11.00 | 24.00 | 29.00 |
| 57 | 9301174.0 | 1.00 | 64.00 | 13.00 | 20.00 | 31.00 |
| 58 | 8800260.0 | 1.00 | 64.00 | 12.00 | 30.00 | 22.00 |
| 59 | 9801206.0 | 1.00 | 65.00 | 9.00 | 23.00 | 33.00 |
| 60 | 8800110.0 | 1.00 | 65.00 | 10.00 | 25.00 | 30.00 |
| 61 | 8800320.0 | 1.00 | 65.00 | 10.00 | 23.00 | 32.00 |
| 62 | 8800092.0 | 1.00 | 65.00 | 11.00 | 24.00 | 30.00 |
| 63 | 9700825.0 | 1.00 | 66.00 | 10.00 | 25.00 | 31.00 |
| 64 | 9401157.0 | 1.00 | 66.00 | 10.00 | 31.00 | 25.00 |
| 65 | 9700745.0 | 1.00 | 66.00 | 13.00 | 24.00 | 29.00 |
| 66 | 9701424.0 | 1.00 | 66.00 | 10.00 | 26.00 | 30.00 |
| 67 | 8700279.0 | 1.00 | 66.00 | 9.00 | 23.00 | 34.00 |
| 68 | 8800087.0 | 1.00 | 66.00 | 10.00 | 26.00 | 30.00 |
| 69 | 9001113.0 | 1.00 | 67.00 | 8.00 | 30.00 | 29.00 |
| 70 | 8800579.0 | 1.00 | 67.00 | 12.00 | 25.00 | 30.00 |
| 71 | 8800518.0 | 1.00 | 67.00 | 20.00 | 25.00 | 22.00 |
| 72 | 8900197.0 | 1.00 | 67.00 | 14.00 | 28.00 | 25.00 |
| 73 | 9301117.0 | 1.00 | 67.00 | 11.00 | 26.00 | 30.00 |
| 74 | 9000998.0 | 1.00 | 67.00 | 12.00 | 26.00 | 29.00 |
| 75 | 8800097.0 | 1.00 | 67.00 | 10.00 | 21.00 | 36.00 |
| 76 | 9001460.0 | 1.00 | 67.00 | 11.00 | 23.00 | 33.00 |
| 77 | 8900699.0 | 1.00 | 67.00 | 7.00 | 27.00 | 33.00 |
| 78 | 9301378.0 | 1.00 | 67.00 | 8.00 | 27.00 | 32.00 |
| 79 | 8900318.0 | 1.00 | 68.00 | 9.00 | 31.00 | 28.00 |
| 80 | 8800305.0 | 1.00 | 68.00 | 12.00 | 28.00 | 28.00 |
| 81 | 8800526.0 | 1.00 | 68.00 | 16.00 | 22.00 | 30.00 |
| 82 | 8800079.0 | 1.00 | 68.00 | 10.00 | 30.00 | 28.00 |
| 83 | 8800447.0 | 1.00 | 68.00 | 16.00 | 27.00 | 25.00 |
| 84 | 8800461.0 | 1.00 | 68.00 | 11.00 | 28.00 | 29.00 |
| 85 | 8900885.0 | 1.00 | 68.00 | 11.00 | 25.00 | 32.00 |
| 86 | 9800952.0 | 1.00 | 68.00 | 8.00 | 24.00 | 36.00 |
| 87 | 9500899.0 | 1.00 | 69.00 | 10.00 | 20.00 | 39.00 |
| 88 | 8800575.0 | 1.00 | 69.00 | 13.00 | 27.00 | 29.00 |
| 89 | 8900286.0 | 1.00 | 69.00 | 9.00 | 26.00 | 34.00 |
| 90 | 8800474.0 | 1.00 | 69.00 | 9.00 | 30.00 | 30.00 |
| 91 | 8800325.0 | 1.00 | 69.00 | 11.00 | 26.00 | 32.00 |
| 92 | 8800321.0 | 1.00 | 70.00 | 13.00 | 26.00 | 31.00 |
| 93 | 9700810.0 | 1.00 | 70.00 | 12.00 | 29.00 | 29.00 |
| 94 | 8900368.0 | 1.00 | 70.00 | 12.00 | 30.00 | 28.00 |
| 95 | 8800483.0 | 1.00 | 71.00 | 5.00 | 26.00 | 40.00 |
| 96 | 9101261.0 | 1.00 | 71.00 | 12.00 | 29.00 | 30.00 |
| 97 | 8800509.0 | 1.00 | 71.00 | 15.00 | 26.00 | 30.00 |

**Case Summaries**

| | ID | GROUP | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|---|
| 98 | 8800523.0 | 1.00 | 71.00 | 13.00 | 25.00 | 33.00 |
| 99 | 8800084.0 | 1.00 | 71.00 | 14.00 | 25.00 | 32.00 |
| 100 | 8800437.0 | 1.00 | 72.00 | 12.00 | 22.00 | 38.00 |
| 101 | 9101274.0 | 1.00 | 72.00 | 12.00 | 32.00 | 28.00 |
| 102 | 8800987.0 | 1.00 | 72.00 | 15.00 | 28.00 | 29.00 |
| 103 | 9101460.0 | 1.00 | 72.00 | 10.00 | 27.00 | 35.00 |
| 104 | 8800425.0 | 1.00 | 72.00 | 15.00 | 23.00 | 34.00 |
| 105 | 8800706.0 | 1.00 | 72.00 | 6.00 | 31.00 | 35.00 |
| 106 | 8700288.0 | 1.00 | 72.00 | 10.00 | 31.00 | 31.00 |
| 107 | 9101036.0 | 1.00 | 72.00 | 12.00 | 25.00 | 35.00 |
| 108 | 8800413.0 | 1.00 | 72.00 | 12.00 | 25.00 | 35.00 |
| 109 | 8800467.0 | 1.00 | 72.00 | 14.00 | 26.00 | 32.00 |
| 110 | 9201128.0 | 1.00 | 72.00 | 13.00 | 31.00 | 28.00 |
| 111 | 8800424.0 | . | 73.00 | 12.00 | 34.00 | 27.00 |
| 112 | 8800457.0 | . | 73.00 | 12.00 | 31.00 | 30.00 |
| 113 | 8901138.0 | . | 73.00 | 13.00 | 34.00 | 26.00 |
| 114 | 9400989.0 | . | 73.00 | 13.00 | 28.00 | 32.00 |
| 115 | 8700324.0 | . | 73.00 | 7.00 | 30.00 | 36.00 |
| 116 | 8800475.0 | . | 73.00 | 14.00 | 27.00 | 32.00 |
| 117 | 9700846.0 | . | 73.00 | 11.00 | 29.00 | 33.00 |
| 118 | 8800332.0 | . | 73.00 | 12.00 | 25.00 | 36.00 |
| 119 | 8900315.0 | . | 73.00 | 13.00 | 27.00 | 33.00 |
| 120 | 8900551.0 | . | 74.00 | 14.00 | 30.00 | 30.00 |
| 121 | 8901253.0 | . | 74.00 | 14.00 | 30.00 | 30.00 |
| 122 | 8800469.0 | . | 74.00 | 15.00 | 25.00 | 34.00 |
| 123 | 9601165.0 | . | 74.00 | 11.00 | 33.00 | 30.00 |
| 124 | 8800479.0 | . | 74.00 | 13.00 | 24.00 | 37.00 |
| 125 | 8800400.0 | . | 74.00 | 11.00 | 29.00 | 34.00 |
| 126 | 9501038.0 | . | 74.00 | 13.00 | 26.00 | 35.00 |
| 127 | 9201448.0 | . | 74.00 | 16.00 | 25.00 | 33.00 |
| 128 | 8800355.0 | . | 74.00 | 10.00 | 33.00 | 31.00 |
| 129 | 8800510.0 | . | 75.00 | 14.00 | 30.00 | 31.00 |
| 130 | 8800548.0 | . | 75.00 | 12.00 | 30.00 | 33.00 |
| 131 | 8800310.0 | . | 75.00 | 13.00 | 29.00 | 33.00 |
| 132 | 8800428.0 | . | 75.00 | 17.00 | 29.00 | 29.00 |
| 133 | 9001323.0 | . | 75.00 | 15.00 | 32.00 | 28.00 |
| 134 | 8900285.0 | . | 76.00 | 10.00 | 28.00 | 38.00 |
| 135 | 8800495.0 | . | 76.00 | 17.00 | 28.00 | 31.00 |
| 136 | 8700191.0 | . | 76.00 | 15.00 | 27.00 | 34.00 |
| 137 | 9500833.0 | . | 76.00 | 14.00 | 30.00 | 32.00 |
| 138 | 8800103.0 | . | 76.00 | 15.00 | 30.00 | 31.00 |
| 139 | 8800685.0 | . | 76.00 | 14.00 | 28.00 | 34.00 |
| 140 | 8800525.0 | . | 76.00 | 17.00 | 31.00 | 28.00 |
| 141 | 9700967.0 | . | 76.00 | 8.00 | 33.00 | 35.00 |
| 142 | 9300797.0 | . | 77.00 | 15.00 | 29.00 | 33.00 |
| 143 | 8800489.0 | . | 77.00 | 11.00 | 30.00 | 36.00 |
| 144 | 8800481.0 | . | 77.00 | 17.00 | 34.00 | 26.00 |
| 145 | 9000874.0 | . | 77.00 | 15.00 | 31.00 | 31.00 |
| 146 | 9700781.0 | . | 77.00 | 12.00 | 33.00 | 32.00 |
| 147 | 8900678.0 | . | 77.00 | 13.00 | 25.00 | 39.00 |
| 148 | 8800095.0 | . | 77.00 | 13.00 | 32.00 | 32.00 |
| 149 | 8900634.0 | . | 77.00 | 13.00 | 35.00 | 29.00 |
| 150 | 8901344.0 | . | 77.00 | 15.00 | 27.00 | 35.00 |
| 151 | 8800240.0 | . | 77.00 | 12.00 | 33.00 | 32.00 |
| 152 | 9101331.0 | . | 77.00 | 12.00 | 31.00 | 34.00 |
| 153 | 9701215.0 | . | 78.00 | 14.00 | 35.00 | 29.00 |

**Case Summaries**

| | ID | GROUP | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|---|
| 154 | 8800421.0 | . | 78.00 | 16.00 | 30.00 | 32.00 |
| 155 | 8800464.0 | . | 78.00 | 18.00 | 29.00 | 31.00 |
| 156 | 8800500.0 | . | 78.00 | 13.00 | 29.00 | 36.00 |
| 157 | 8800420.0 | . | 78.00 | 18.00 | 27.00 | 33.00 |
| 158 | 8800555.0 | . | 79.00 | 10.00 | 26.00 | 43.00 |
| 159 | 8800317.0 | . | 79.00 | 15.00 | 28.00 | 36.00 |
| 160 | 9600906.0 | . | 79.00 | 13.00 | 28.00 | 38.00 |
| 161 | 8800427.0 | . | 79.00 | 15.00 | 30.00 | 34.00 |
| 162 | 8700887.0 | . | 79.00 | 13.00 | 26.00 | 40.00 |
| 163 | 8700213.0 | . | 79.00 | 12.00 | 35.00 | 32.00 |
| 164 | 8800488.0 | . | 79.00 | 19.00 | 27.00 | 33.00 |
| 165 | 9101504.0 | . | 79.00 | 12.00 | 29.00 | 38.00 |
| 166 | 8800556.0 | . | 79.00 | 13.00 | 38.00 | 28.00 |
| 167 | 9001297.0 | . | 79.00 | 14.00 | 30.00 | 35.00 |
| 168 | 9300993.0 | . | 79.00 | 10.00 | 33.00 | 36.00 |
| 169 | 8800083.0 | . | 79.00 | 13.00 | 25.00 | 41.00 |
| 170 | 8800602.0 | . | 79.00 | 12.00 | 31.00 | 36.00 |
| 171 | 8800082.0 | . | 79.00 | 14.00 | 27.00 | 38.00 |
| 172 | 8800452.0 | . | 80.00 | 15.00 | 31.00 | 34.00 |
| 173 | 8800480.0 | . | 80.00 | 16.00 | 33.00 | 31.00 |
| 174 | 8800472.0 | . | 80.00 | 12.00 | 32.00 | 36.00 |
| 175 | 8900530.0 | . | 80.00 | 16.00 | 32.00 | 32.00 |
| 176 | 9701445.0 | . | 80.00 | 17.00 | 26.00 | 37.00 |
| 177 | 9600753.0 | . | 80.00 | 14.00 | 29.00 | 37.00 |
| 178 | 8700541.0 | . | 80.00 | 12.00 | 31.00 | 37.00 |
| 179 | 9700492.0 | . | 80.00 | 12.00 | 37.00 | 31.00 |
| 180 | 8800106.0 | . | 81.00 | 13.00 | 32.00 | 36.00 |
| 181 | 8800076.0 | . | 81.00 | 15.00 | 33.00 | 33.00 |
| 182 | 8800302.0 | . | 81.00 | 16.00 | 32.00 | 33.00 |
| 183 | 8800098.0 | . | 81.00 | 17.00 | 28.00 | 36.00 |
| 184 | 9601024.0 | . | 81.00 | 15.00 | 35.00 | 31.00 |
| 185 | 9501460.0 | . | 81.00 | 11.00 | 34.00 | 36.00 |
| 186 | 8800459.0 | . | 81.00 | 16.00 | 34.00 | 31.00 |
| 187 | 8901188.0 | . | 81.00 | 18.00 | 35.00 | 28.00 |
| 188 | 8900351.0 | . | 81.00 | 15.00 | 33.00 | 33.00 |
| 189 | 8900529.0 | . | 82.00 | 16.00 | 30.00 | 36.00 |
| 190 | 9601185.0 | . | 82.00 | 11.00 | 28.00 | 43.00 |
| 191 | 8800065.0 | . | 82.00 | 16.00 | 36.00 | 30.00 |
| 192 | 9101322.0 | . | 82.00 | 15.00 | 36.00 | 31.00 |
| 193 | 8900316.0 | . | 82.00 | 16.00 | 33.00 | 33.00 |
| 194 | 8800438.0 | . | 82.00 | 15.00 | 33.00 | 34.00 |
| 195 | 8800501.0 | . | 82.00 | 14.00 | 34.00 | 34.00 |
| 196 | 8900679.0 | . | 82.00 | 17.00 | 31.00 | 34.00 |
| 197 | 9500762.0 | . | 82.00 | 13.00 | 33.00 | 36.00 |
| 198 | 8801053.0 | . | 82.00 | 11.00 | 33.00 | 38.00 |
| 199 | 9300866.0 | . | 82.00 | 12.00 | 33.00 | 37.00 |
| 200 | 9701126.0 | . | 82.00 | 13.00 | 35.00 | 34.00 |
| 201 | 9400871.0 | . | 83.00 | 14.00 | 34.00 | 35.00 |
| 202 | 9401007.0 | . | 83.00 | 16.00 | 33.00 | 34.00 |
| 203 | 9501014.0 | . | 83.00 | 16.00 | 30.00 | 37.00 |
| 204 | 8801234.0 | . | 83.00 | 15.00 | 31.00 | 37.00 |
| 205 | 9100805.0 | . | 83.00 | 17.00 | 32.00 | 34.00 |
| 206 | 8800235.0 | . | 83.00 | 16.00 | 35.00 | 32.00 |
| 207 | 8800109.0 | . | 83.00 | 15.00 | 32.00 | 36.00 |
| 208 | 8800309.0 | . | 84.00 | 12.00 | 36.00 | 36.00 |
| 209 | 8800108.0 | . | 84.00 | 16.00 | 34.00 | 34.00 |

**Case Summaries**

| | ID | GROUP | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|---|
| 210 | 9800849.0 | . | 84.00 | 13.00 | 36.00 | 35.00 |
| 211 | 8801268.0 | . | 84.00 | 12.00 | 33.00 | 39.00 |
| 212 | 8900970.0 | . | 84.00 | 16.00 | 34.00 | 34.00 |
| 213 | 8800515.0 | . | 84.00 | 14.00 | 32.00 | 38.00 |
| 214 | 9200893.0 | . | 84.00 | 16.00 | 31.00 | 37.00 |
| 215 | 8800536.0 | . | 84.00 | 15.00 | 31.00 | 38.00 |
| 216 | 8800585.0 | . | 84.00 | 17.00 | 33.00 | 34.00 |
| 217 | 8901434.0 | . | 84.00 | 13.00 | 34.00 | 37.00 |
| 218 | 8800514.0 | . | 84.00 | 13.00 | 33.00 | 38.00 |
| 219 | 8900370.0 | . | 85.00 | 13.00 | 32.00 | 40.00 |
| 220 | 9301516.0 | . | 85.00 | 17.00 | 34.00 | 34.00 |
| 221 | 9401411.0 | . | 85.00 | 17.00 | 33.00 | 35.00 |
| 222 | 8800069.0 | . | 85.00 | 17.00 | 35.00 | 33.00 |
| 223 | 8800522.0 | . | 85.00 | 18.00 | 33.00 | 34.00 |
| 224 | 8700159.0 | . | 85.00 | 16.00 | 31.00 | 38.00 |
| 225 | 9301429.0 | . | 85.00 | 16.00 | 37.00 | 32.00 |
| 226 | 9701371.0 | . | 85.00 | 20.00 | 30.00 | 35.00 |
| 227 | 9101099.0 | . | 85.00 | 16.00 | 34.00 | 35.00 |
| 228 | 8800465.0 | . | 86.00 | 16.00 | 34.00 | 36.00 |
| 229 | 8800451.0 | . | 86.00 | 14.00 | 33.00 | 39.00 |
| 230 | 8800253.0 | . | 86.00 | 15.00 | 27.00 | 44.00 |
| 231 | 8800436.0 | . | 86.00 | 14.00 | 34.00 | 38.00 |
| 232 | 9701031.0 | . | 86.00 | 15.00 | 29.00 | 42.00 |
| 233 | 8700430.0 | . | 86.00 | 19.00 | 34.00 | 33.00 |
| 234 | 8900195.0 | . | 86.00 | 12.00 | 32.00 | 42.00 |
| 235 | 9501016.0 | . | 86.00 | 14.00 | 38.00 | 34.00 |
| 236 | 8800508.0 | . | 86.00 | 13.00 | 38.00 | 35.00 |
| 237 | 8700224.0 | . | 86.00 | 15.00 | 25.00 | 46.00 |
| 238 | 8801065.0 | . | 86.00 | 15.00 | 34.00 | 37.00 |
| 239 | 8800409.0 | . | 87.00 | 15.00 | 34.00 | 38.00 |
| 240 | 8800145.0 | . | 87.00 | 15.00 | 38.00 | 34.00 |
| 241 | 8800068.0 | . | 87.00 | 14.00 | 34.00 | 39.00 |
| 242 | 9101425.0 | . | 87.00 | 15.00 | 34.00 | 38.00 |
| 243 | 9601117.0 | . | 87.00 | 14.00 | 32.00 | 41.00 |
| 244 | 9700097.0 | . | 87.00 | 17.00 | 31.00 | 39.00 |
| 245 | 9200743.0 | . | 87.00 | 15.00 | 34.00 | 38.00 |
| 246 | 8800576.0 | . | 87.00 | 14.00 | 36.00 | 37.00 |
| 247 | 8800067.0 | . | 87.00 | 16.00 | 32.00 | 39.00 |
| 248 | 8800099.0 | . | 87.00 | 15.00 | 32.00 | 40.00 |
| 249 | 8900794.0 | . | 87.00 | 15.00 | 35.00 | 37.00 |
| 250 | 8800327.0 | . | 88.00 | 16.00 | 33.00 | 39.00 |
| 251 | 9800940.0 | . | 88.00 | 14.00 | 34.00 | 40.00 |
| 252 | 8800506.0 | . | 88.00 | 14.00 | 34.00 | 40.00 |
| 253 | 9301277.0 | . | 88.00 | 16.00 | 36.00 | 36.00 |
| 254 | 9200848.0 | . | 88.00 | 11.00 | 38.00 | 39.00 |
| 255 | 9000830.0 | . | 88.00 | 14.00 | 32.00 | 42.00 |
| 256 | 8900317.0 | . | 88.00 | 16.00 | 35.00 | 37.00 |
| 257 | 9701267.0 | . | 88.00 | 17.00 | 29.00 | 42.00 |
| 258 | 9700094.0 | . | 88.00 | 9.00 | 37.00 | 42.00 |
| 259 | 9200838.0 | . | 88.00 | 16.00 | 37.00 | 35.00 |
| 260 | 9701257.0 | . | 88.00 | 17.00 | 35.00 | 36.00 |
| 261 | 8800494.0 | . | 88.00 | 17.00 | 37.00 | 34.00 |
| 262 | 9601332.0 | . | 88.00 | 16.00 | 34.00 | 38.00 |
| 263 | 7103624.0 | . | 88.00 | 11.00 | 37.00 | 40.00 |
| 264 | 8800547.0 | . | 88.00 | 13.00 | 35.00 | 40.00 |
| 265 | 8800507.0 | . | 88.00 | 18.00 | 34.00 | 36.00 |

**Case Summaries**

| | ID | GROUP | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|---|
| 266 | 8900631.0 | . | 89.00 | 15.00 | 32.00 | 42.00 |
| 267 | 8901416.0 | . | 89.00 | 18.00 | 38.00 | 33.00 |
| 268 | 9801116.0 | . | 89.00 | 17.00 | 38.00 | 34.00 |
| 269 | 9201357.0 | . | 89.00 | 15.00 | 36.00 | 38.00 |
| 270 | 9600773.0 | . | 89.00 | 13.00 | 36.00 | 40.00 |
| 271 | 9701303.0 | . | 89.00 | 13.00 | 34.00 | 42.00 |
| 272 | 8800456.0 | . | 89.00 | 17.00 | 38.00 | 34.00 |
| 273 | 8800729.0 | . | 89.00 | 14.00 | 40.00 | 35.00 |
| 274 | 8800513.0 | . | 89.00 | 11.00 | 33.00 | 45.00 |
| 275 | 8800790.0 | . | 89.00 | 19.00 | 34.00 | 36.00 |
| 276 | 8800521.0 | . | 89.00 | 18.00 | 37.00 | 34.00 |
| 277 | 8800085.0 | . | 89.00 | 18.00 | 35.00 | 36.00 |
| 278 | 9001014.0 | . | 89.00 | 15.00 | 40.00 | 34.00 |
| 279 | 9800859.0 | . | 89.00 | 12.00 | 32.00 | 45.00 |
| 280 | 9501088.0 | . | 89.00 | 11.00 | 34.00 | 44.00 |
| 281 | 9301502.0 | . | 89.00 | 15.00 | 41.00 | 33.00 |
| 282 | 9701514.0 | . | 90.00 | 14.00 | 40.00 | 36.00 |
| 283 | 8900019.0 | . | 90.00 | 15.00 | 36.00 | 39.00 |
| 284 | 8800094.0 | . | 90.00 | 16.00 | 34.00 | 40.00 |
| 285 | 8700188.0 | . | 90.00 | 18.00 | 35.00 | 37.00 |
| 286 | 8800431.0 | . | 90.00 | 15.00 | 35.00 | 40.00 |
| 287 | 8700628.0 | . | 90.00 | 14.00 | 34.00 | 42.00 |
| 288 | 9501037.0 | . | 91.00 | 16.00 | 37.00 | 38.00 |
| 289 | 8800140.0 | . | 91.00 | 15.00 | 36.00 | 40.00 |
| 290 | 9401042.0 | . | 91.00 | 14.00 | 36.00 | 41.00 |
| 291 | 8800598.0 | . | 91.00 | 16.00 | 34.00 | 41.00 |
| 292 | 9500788.0 | . | 91.00 | 19.00 | 40.00 | 32.00 |
| 293 | 8900287.0 | . | 91.00 | 16.00 | 38.00 | 37.00 |
| 294 | 8800080.0 | . | 91.00 | 17.00 | 34.00 | 40.00 |
| 295 | 8800519.0 | . | 91.00 | 16.00 | 40.00 | 35.00 |
| 296 | 8800314.0 | . | 91.00 | 13.00 | 37.00 | 41.00 |
| 297 | 8800090.0 | . | 91.00 | 16.00 | 32.00 | 43.00 |
| 298 | 9500753.0 | . | 91.00 | 14.00 | 37.00 | 40.00 |
| 299 | 9601075.0 | . | 91.00 | 17.00 | 34.00 | 40.00 |
| 300 | 8800407.0 | . | 91.00 | 15.00 | 32.00 | 44.00 |
| 301 | 8801292.0 | . | 92.00 | 17.00 | 40.00 | 35.00 |
| 302 | 8800072.0 | . | 92.00 | 16.00 | 36.00 | 40.00 |
| 303 | 8800426.0 | . | 92.00 | 15.00 | 34.00 | 43.00 |
| 304 | 8800491.0 | . | 92.00 | 18.00 | 38.00 | 36.00 |
| 305 | 9400735.0 | . | 92.00 | 15.00 | 39.00 | 38.00 |
| 306 | 8800980.0 | . | 92.00 | 15.00 | 35.00 | 42.00 |
| 307 | 9700095.0 | . | 92.00 | 18.00 | 42.00 | 32.00 |
| 308 | 8800071.0 | 3.00 | 93.00 | 19.00 | 33.00 | 41.00 |
| 309 | 8800236.0 | 3.00 | 93.00 | 17.00 | 39.00 | 37.00 |
| 310 | 8800445.0 | 3.00 | 93.00 | 16.00 | 39.00 | 38.00 |
| 311 | 9000755.0 | 3.00 | 93.00 | 15.00 | 35.00 | 43.00 |
| 312 | 8800835.0 | 3.00 | 93.00 | 21.00 | 37.00 | 35.00 |
| 313 | 8800416.0 | 3.00 | 93.00 | 16.00 | 36.00 | 41.00 |
| 314 | 8801251.0 | 3.00 | 93.00 | 19.00 | 34.00 | 40.00 |
| 315 | 9301085.0 | 3.00 | 93.00 | 16.00 | 35.00 | 42.00 |
| 316 | 9101041.0 | 3.00 | 93.00 | 17.00 | 37.00 | 39.00 |
| 317 | 9300786.0 | 3.00 | 93.00 | 16.00 | 39.00 | 38.00 |
| 318 | 8700186.0 | 3.00 | 94.00 | 16.00 | 39.00 | 39.00 |
| 319 | 9301496.0 | 3.00 | 94.00 | 17.00 | 37.00 | 40.00 |
| 320 | 9700945.0 | 3.00 | 94.00 | 19.00 | 36.00 | 39.00 |
| 321 | 9701362.0 | 3.00 | 94.00 | 15.00 | 37.00 | 42.00 |

**Case Summaries**

| | ID | GROUP | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|---|
| 322 | 9700773.0 | 3.00 | 94.00 | 17.00 | 38.00 | 39.00 |
| 323 | 9400982.0 | 3.00 | 94.00 | 17.00 | 33.00 | 44.00 |
| 324 | 9701405.0 | 3.00 | 94.00 | 17.00 | 36.00 | 41.00 |
| 325 | 8800299.0 | 3.00 | 95.00 | 16.00 | 37.00 | 42.00 |
| 326 | 8800331.0 | 3.00 | 95.00 | 16.00 | 41.00 | 38.00 |
| 327 | 8800516.0 | 3.00 | 95.00 | 17.00 | 36.00 | 42.00 |
| 328 | 8900826.0 | 3.00 | 95.00 | 17.00 | 40.00 | 38.00 |
| 329 | 9201120.0 | 3.00 | 95.00 | 18.00 | 42.00 | 35.00 |
| 330 | 9400948.0 | 3.00 | 95.00 | 16.00 | 41.00 | 38.00 |
| 331 | 8800394.0 | 3.00 | 95.00 | 16.00 | 40.00 | 39.00 |
| 332 | 8900870.0 | 3.00 | 95.00 | 15.00 | 39.00 | 41.00 |
| 333 | 9201272.0 | 3.00 | 95.00 | 18.00 | 36.00 | 41.00 |
| 334 | 9501042.0 | 3.00 | 96.00 | 19.00 | 42.00 | 35.00 |
| 335 | 9200739.0 | 3.00 | 96.00 | 19.00 | 45.00 | 32.00 |
| 336 | 8900661.0 | 3.00 | 96.00 | 17.00 | 39.00 | 40.00 |
| 337 | 9800690.0 | 3.00 | 96.00 | 17.00 | 40.00 | 39.00 |
| 338 | 9500765.0 | 3.00 | 96.00 | 14.00 | 43.00 | 39.00 |
| 339 | 8800402.0 | 3.00 | 96.00 | 17.00 | 39.00 | 40.00 |
| 340 | 9500961.0 | 3.00 | 96.00 | 15.00 | 38.00 | 43.00 |
| 341 | 8800485.0 | 3.00 | 96.00 | 18.00 | 36.00 | 42.00 |
| 342 | 8700514.0 | 3.00 | 96.00 | 18.00 | 36.00 | 42.00 |
| 343 | 8800624.0 | 3.00 | 97.00 | 19.00 | 35.00 | 43.00 |
| 344 | 9800878.0 | 3.00 | 97.00 | 15.00 | 42.00 | 40.00 |
| 345 | 9700386.0 | 3.00 | 97.00 | 18.00 | 44.00 | 35.00 |
| 346 | 8800470.0 | 3.00 | 97.00 | 17.00 | 37.00 | 43.00 |
| 347 | 8901441.0 | 3.00 | 97.00 | 14.00 | 39.00 | 44.00 |
| 348 | 8900677.0 | 3.00 | 97.00 | 20.00 | 40.00 | 37.00 |
| 349 | 8700425.0 | 3.00 | 97.00 | 17.00 | 45.00 | 35.00 |
| 350 | 9800883.0 | 3.00 | 97.00 | 17.00 | 40.00 | 40.00 |
| 351 | 9800959.0 | 3.00 | 97.00 | 13.00 | 37.00 | 47.00 |
| 352 | 9200173.0 | 3.00 | 98.00 | 15.00 | 39.00 | 44.00 |
| 353 | 9601053.0 | 3.00 | 98.00 | 14.00 | 38.00 | 46.00 |
| 354 | 9700098.0 | 3.00 | 98.00 | 17.00 | 38.00 | 43.00 |
| 355 | 8800625.0 | 3.00 | 98.00 | 17.00 | 41.00 | 40.00 |
| 356 | 9500817.0 | 3.00 | 98.00 | 18.00 | 37.00 | 43.00 |
| 357 | 9201009.0 | 3.00 | 98.00 | 19.00 | 38.00 | 41.00 |
| 358 | 9601284.0 | 3.00 | 98.00 | 19.00 | 40.00 | 39.00 |
| 359 | 8800275.0 | 3.00 | 99.00 | 15.00 | 38.00 | 46.00 |
| 360 | 9501306.0 | 3.00 | 99.00 | 18.00 | 36.00 | 45.00 |
| 361 | 8900752.0 | 3.00 | 99.00 | 16.00 | 43.00 | 40.00 |
| 362 | 9800958.0 | 3.00 | 99.00 | 18.00 | 40.00 | 41.00 |
| 363 | 8800497.0 | 3.00 | 99.00 | 16.00 | 40.00 | 43.00 |
| 364 | 8800430.0 | 3.00 | 99.00 | 19.00 | 45.00 | 35.00 |
| 365 | 8801110.0 | 3.00 | 99.00 | 18.00 | 40.00 | 41.00 |
| 366 | 9200791.0 | 3.00 | 99.00 | 19.00 | 42.00 | 38.00 |
| 367 | 8800511.0 | 3.00 | 100.00 | 18.00 | 38.00 | 44.00 |
| 368 | 9500787.0 | 3.00 | 100.00 | 17.00 | 38.00 | 45.00 |
| 369 | 9400748.0 | 3.00 | 100.00 | 18.00 | 40.00 | 42.00 |
| 370 | 9601215.0 | 3.00 | 100.00 | 18.00 | 39.00 | 43.00 |
| 371 | 8701392.0 | 3.00 | 100.00 | 18.00 | 40.00 | 42.00 |
| 372 | 8901490.0 | 3.00 | 100.00 | 10.00 | 44.00 | 46.00 |
| 373 | 9500763.0 | 3.00 | 100.00 | 17.00 | 40.00 | 43.00 |
| 374 | 8800524.0 | 3.00 | 101.00 | 22.00 | 39.00 | 40.00 |
| 375 | 9100696.0 | 3.00 | 101.00 | 18.00 | 38.00 | 45.00 |
| 376 | 8800100.0 | 3.00 | 101.00 | 23.00 | 36.00 | 42.00 |
| 377 | 8800248.0 | 3.00 | 101.00 | 19.00 | 41.00 | 41.00 |

**Case Summaries**

| | | ID | GROUP | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|---|---|
| 378 | | 9700695.0 | 3.00 | 101.00 | 19.00 | 41.00 | 41.00 |
| 379 | | 8800096.0 | 3.00 | 101.00 | 15.00 | 42.00 | 44.00 |
| 380 | | 9700184.0 | 3.00 | 102.00 | 17.00 | 42.00 | 43.00 |
| 381 | | 9400684.0 | 3.00 | 102.00 | 18.00 | 38.00 | 46.00 |
| 382 | | 8900886.0 | 3.00 | 102.00 | 18.00 | 39.00 | 45.00 |
| 383 | | 8800422.0 | 3.00 | 102.00 | 23.00 | 38.00 | 41.00 |
| 384 | | 9300898.0 | 3.00 | 102.00 | 21.00 | 37.00 | 44.00 |
| 385 | | 8800223.0 | 3.00 | 102.00 | 17.00 | 46.00 | 39.00 |
| 386 | | 8800261.0 | 3.00 | 102.00 | 23.00 | 43.00 | 36.00 |
| 387 | | 9700977.0 | 3.00 | 102.00 | 20.00 | 37.00 | 45.00 |
| 388 | | 8800070.0 | 3.00 | 103.00 | 19.00 | 42.00 | 42.00 |
| 389 | | 9700734.0 | 3.00 | 103.00 | 19.00 | 44.00 | 40.00 |
| 390 | | 9101496.0 | 3.00 | 104.00 | 20.00 | 43.00 | 41.00 |
| 391 | | 9700956.0 | 3.00 | 104.00 | 19.00 | 42.00 | 43.00 |
| 392 | | 8800298.0 | 3.00 | 104.00 | 20.00 | 40.00 | 44.00 |
| 393 | | 8800442.0 | 3.00 | 105.00 | 22.00 | 49.00 | 34.00 |
| 394 | | 9301491.0 | 3.00 | 105.00 | 22.00 | 41.00 | 42.00 |
| 395 | | 9301046.0 | 3.00 | 105.00 | 19.00 | 40.00 | 46.00 |
| 396 | | 9500870.0 | 3.00 | 106.00 | 20.00 | 40.00 | 46.00 |
| 397 | | 9700840.0 | 3.00 | 106.00 | 16.00 | 41.00 | 49.00 |
| 398 | | 8800311.0 | 3.00 | 106.00 | 18.00 | 43.00 | 45.00 |
| 399 | | 8800412.0 | 3.00 | 106.00 | 20.00 | 43.00 | 43.00 |
| 400 | | 8800395.0 | 3.00 | 106.00 | 18.00 | 41.00 | 47.00 |
| 401 | | 8800490.0 | 3.00 | 107.00 | 20.00 | 45.00 | 42.00 |
| 402 | | 8700298.0 | 3.00 | 107.00 | 18.00 | 43.00 | 46.00 |
| 403 | | 8800415.0 | 3.00 | 107.00 | 19.00 | 43.00 | 45.00 |
| 404 | | 9700780.0 | 3.00 | 108.00 | 18.00 | 43.00 | 47.00 |
| 405 | | 9001337.0 | 3.00 | 108.00 | 20.00 | 42.00 | 46.00 |
| 406 | | 7103305.0 | 3.00 | 109.00 | 20.00 | 44.00 | 45.00 |
| 407 | | 9700096.0 | 3.00 | 109.00 | 19.00 | 45.00 | 45.00 |
| 408 | | 8800498.0 | 3.00 | 109.00 | 20.00 | 46.00 | 43.00 |
| 409 | | 8800234.0 | 3.00 | 110.00 | 20.00 | 42.00 | 48.00 |
| 410 | | 8901095.0 | 3.00 | 111.00 | 19.00 | 45.00 | 47.00 |
| 411 | | 9700093.0 | 3.00 | 112.00 | 20.00 | 47.00 | 45.00 |
| 412 | | 9200902.0 | 3.00 | 113.00 | 20.00 | 43.00 | 50.00 |
| 413 | | 9301210.0 | 3.00 | 113.00 | 19.00 | 48.00 | 46.00 |
| 414 | | 8800398.0 | 3.00 | 114.00 | 20.00 | 50.00 | 44.00 |
| 415 | | 9400863.0 | 3.00 | 117.00 | 23.00 | 45.00 | 49.00 |
| 416 | | 9701450.0 | 3.00 | 117.00 | 22.00 | 49.00 | 46.00 |
| 417 | | 8800463.0 | 3.00 | 118.00 | 21.00 | 48.00 | 49.00 |
| 418 | | 8800520.0 | 3.00 | 119.00 | 21.00 | 48.00 | 50.00 |
| 419 | | 9801040.0 | 3.00 | 120.00 | 18.00 | 52.00 | 50.00 |
| 420 | | 8900830.0 | 3.00 | 122.00 | 24.00 | 47.00 | 51.00 |
| Total | N | 420 | 223 | 420 | 420 | 420 | 420 |

Appendix L

Correlations and T-tests between Score and Subscales

# Correlations

**Correlations**

| | | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|
| SCORE | Pearson Correlation | 1.000 | .811** | .931** | .873** |
| | Sig. (2-tailed) | . | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 |
| SAT | Pearson Correlation | .811** | 1.000 | .718** | .552** |
| | Sig. (2-tailed) | .000 | . | .000 | .000 |
| | N | 420 | 420 | 420 | 420 |
| COM | Pearson Correlation | .931** | .718** | 1.000 | .683** |
| | Sig. (2-tailed) | .000 | .000 | . | .000 |
| | N | 420 | 420 | 420 | 420 |
| TCH | Pearson Correlation | .873** | .552** | .683** | 1.000 |
| | Sig. (2-tailed) | .000 | .000 | .000 | . |
| | N | 420 | 420 | 420 | 420 |

**. Correlation is significant at the 0.01 level (2-tailed).

## Correlations

**Correlations**

| | | | SAT | Q3 5 | Q7 1 | Q11 1 | Q19 1 | Q24 1 |
|---|---|---|---|---|---|---|---|---|
| SAT | | Pearson Correlation | 1.000 | .777** | .807** | .867** | .773** | .762** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q3 | 5 | Pearson Correlation | .777** | 1.000 | .528** | .600** | .455** | .497** |
| | | Sig. (2-tailed) | .000 | . | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q7 | 1 | Pearson Correlation | .807** | .528** | 1.000 | .679** | .527** | .516** |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q11 | 1 | Pearson Correlation | .867** | .600** | .679** | 1.000 | .550** | .605** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q19 | 1 | Pearson Correlation | .773** | .455** | .527** | .550** | 1.000 | .499** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q24 | 1 | Pearson Correlation | .762** | .497** | .516** | .605** | .499** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |

**. Correlation is significant at the 0.01 level (2-tailed).

## Correlations

**Correlations**

| | | | COM | Q1 5 | Q5 5 | Q9 5 | Q13 5 | Q15 1 |
|---|---|---|---|---|---|---|---|---|
| COM | | Pearson Correlation | 1.000 | .639** | .622** | .737** | .624** | .610** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q1 | 5 | Pearson Correlation | .639** | 1.000 | .348** | .501** | .403** | .249** |
| | | Sig. (2-tailed) | .000 | . | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q5 | 5 | Pearson Correlation | .622** | .348** | 1.000 | .364** | .402** | .296** |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q9 | 5 | Pearson Correlation | .737** | .501** | .364** | 1.000 | .434** | .337** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q13 | 5 | Pearson Correlation | .624** | .403** | .402** | .434** | 1.000 | .228** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q15 | 1 | Pearson Correlation | .610** | .249** | .296** | .337** | .228** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q17 | 5 | Pearson Correlation | .597** | .257** | .339** | .362** | .307** | .352** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q20 | 5 | Pearson Correlation | .675** | .299** | .308** | .457** | .313** | .401** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q22 | 1 | Pearson Correlation | .755** | .396** | .424** | .480** | .372** | .397** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q23 | 1 | Pearson Correlation | .626** | .308** | .341** | .331** | .300** | .381** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q25 | 5 | Pearson Correlation | .656** | .354** | .371** | .442** | .401** | .250** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q27 | 5 | Pearson Correlation | .801** | .465** | .505** | .558** | .470** | .422** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |

**Correlations**

| | | | Q17 5 | Q20 5 | Q22 1 | Q23 1 | Q25 5 | Q27 5 |
|---|---|---|---|---|---|---|---|---|
| COM | | Pearson Correlation | .597** | .675** | .755** | .626** | .656** | .801** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q1 | 5 | Pearson Correlation | .257** | .299** | .396** | .308** | .354** | .465** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q5 | 5 | Pearson Correlation | .339** | .308** | .424** | .341** | .371** | .505** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q9 | 5 | Pearson Correlation | .362** | .457** | .480** | .331** | .442** | .558** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q13 | 5 | Pearson Correlation | .307** | .313** | .372** | .300** | .401** | .470** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q15 | 1 | Pearson Correlation | .352** | .401** | .397** | .381** | .250** | .422** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q17 | 5 | Pearson Correlation | 1.000 | .317** | .475** | .339** | .288** | .460** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q20 | 5 | Pearson Correlation | .317** | 1.000 | .541** | .379** | .418** | .474** |
| | | Sig. (2-tailed) | .000 | . | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q22 | 1 | Pearson Correlation | .475** | .541** | 1.000 | .527** | .471** | .594** |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q23 | 1 | Pearson Correlation | .339** | .379** | .527** | 1.000 | .333** | .420** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q25 | 5 | Pearson Correlation | .288** | .418** | .471** | .333** | 1.000 | .578** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q27 | 5 | Pearson Correlation | .460** | .474** | .594** | .420** | .578** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |

**. Correlation is significant at the 0.01 level (2-tailed).

## Correlations

**Correlations**

| | | | TCH | Q2 1 | Q4 5 | Q6 5 | Q8 1 | Q10 5 |
|---|---|---|---|---|---|---|---|---|
| TCH | | Pearson Correlation | 1.000 | .468** | .582** | .663** | .671** | .507** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q2 | 1 | Pearson Correlation | .468** | 1.000 | .141** | .156** | .185** | .073 |
| | | Sig. (2-tailed) | .000 | . | .004 | .001 | .000 | .135 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q4 | 5 | Pearson Correlation | .582** | .141** | 1.000 | .527** | .330** | .263** |
| | | Sig. (2-tailed) | .000 | .004 | . | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q6 | 5 | Pearson Correlation | .663** | .156** | .527** | 1.000 | .393** | .352** |
| | | Sig. (2-tailed) | .000 | .001 | .000 | . | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q8 | 1 | Pearson Correlation | .671** | .185** | .330** | .393** | 1.000 | .251** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q10 | 5 | Pearson Correlation | .507** | .073 | .263** | .352** | .251** | 1.000 |
| | | Sig. (2-tailed) | .000 | .135 | .000 | .000 | .000 | . |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q12 | 1 | Pearson Correlation | .618** | .365** | .263** | .278** | .415** | .162** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .001 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q14 | 5 | Pearson Correlation | .544** | .054 | .293** | .387** | .309** | .307** |
| | | Sig. (2-tailed) | .000 | .269 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q16 | 1 | Pearson Correlation | .500** | .254** | .200** | .165** | .288** | .091 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .001 | .000 | .061 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q18 | 1 | Pearson Correlation | .677** | .538** | .239** | .290** | .396** | .204** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q21 | 1 | Pearson Correlation | .632** | .271** | .256** | .297** | .415** | .162** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .001 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q26 | 1 | Pearson Correlation | .619** | .184** | .202** | .301** | .425** | .207** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |

**Correlations**

| | | | Q12 1 | Q14 5 | Q16 1 | Q18 1 | Q21 1 | Q26 1 |
|---|---|---|---|---|---|---|---|---|
| TCH | | Pearson Correlation | .618** | .544** | .500** | .677** | .632** | .619** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q2 | 1 | Pearson Correlation | .365** | .054 | .254** | .538** | .271** | .184** |
| | | Sig. (2-tailed) | .000 | .269 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q4 | 5 | Pearson Correlation | .263** | .293** | .200** | .239** | .256** | .202** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q6 | 5 | Pearson Correlation | .278** | .387** | .165** | .290** | .297** | .301** |
| | | Sig. (2-tailed) | .000 | .000 | .001 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q8 | 1 | Pearson Correlation | .415** | .309** | .288** | .396** | .415** | .425** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q10 | 5 | Pearson Correlation | .162** | .307** | .091 | .204** | .162** | .207** |
| | | Sig. (2-tailed) | .001 | .000 | .061 | .000 | .001 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q12 | 1 | Pearson Correlation | 1.000 | .193** | .307** | .476** | .379** | .342** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q14 | 5 | Pearson Correlation | .193** | 1.000 | .165** | .181** | .194** | .297** |
| | | Sig. (2-tailed) | .000 | . | .001 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q16 | 1 | Pearson Correlation | .307** | .165** | 1.000 | .414** | .350** | .264** |
| | | Sig. (2-tailed) | .000 | .001 | . | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q18 | 1 | Pearson Correlation | .476** | .181** | .414** | 1.000 | .464** | .334** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q21 | 1 | Pearson Correlation | .379** | .194** | .350** | .464** | 1.000 | .364** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . | .000 |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |
| Q26 | 1 | Pearson Correlation | .342** | .297** | .264** | .334** | .364** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | | N | 420 | 420 | 420 | 420 | 420 | 420 |

**. Correlation is significant at the 0.01 level (2-tailed).

# T-Test

**Group Statistics**

| | GROUP | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| SCORE | 1.00 | 110 | 62.6000 | 7.5653 | .7213 |
| | 3.00 | 113 | 100.8230 | 6.7311 | .6332 |
| SAT | 1.00 | 110 | 10.3818 | 2.7826 | .2653 |
| | 3.00 | 113 | 18.0796 | 2.2918 | .2156 |
| COM | 1.00 | 110 | 23.5818 | 4.3333 | .4132 |
| | 3.00 | 113 | 40.5664 | 3.7888 | .3564 |
| TCH | 1.00 | 110 | 28.6364 | 4.4366 | .4230 |
| | 3.00 | 113 | 42.1770 | 3.8037 | .3578 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | |
|---|---|---|---|
| | | F | Sig. |
| SCORE | Equal variances assumed | 1.418 | .235 |
| | Equal variances not assumed | | |
| SAT | Equal variances assumed | 3.450 | .065 |
| | Equal variances not assumed | | |
| COM | Equal variances assumed | 1.854 | .175 |
| | Equal variances not assumed | | |
| TCH | Equal variances assumed | 1.215 | .271 |
| | Equal variances not assumed | | |

**Independent Samples Test**

| | | t-test for Equality of Means | | | |
|---|---|---|---|---|---|
| | | t | df | Sig. (2-tailed) | Mean Difference |
| SCORE | Equal variances assumed | -39.886 | 221 | .000 | -38.2230 |
| | Equal variances not assumed | -39.823 | 216.563 | .000 | -38.2230 |
| SAT | Equal variances assumed | -22.576 | 221 | .000 | -7.6978 |
| | Equal variances not assumed | -22.517 | 210.961 | .000 | -7.6978 |
| COM | Equal variances assumed | -31.183 | 221 | .000 | -16.9846 |
| | Equal variances not assumed | -31.127 | 215.466 | .000 | -16.9846 |
| TCH | Equal variances assumed | -24.490 | 221 | .000 | -13.5406 |
| | Equal variances not assumed | -24.439 | 214.109 | .000 | -13.5406 |

**Independent Samples Test**

| | | t-test for Equality of Means | | |
|---|---|---|---|---|
| | | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | Lower | Upper |
| SCORE | Equal variances assumed | .9583 | -40.1116 | -36.3344 |
| | Equal variances not assumed | .9598 | -40.1148 | -36.3312 |
| SAT | Equal variances assumed | .3410 | -8.3698 | -7.0258 |
| | Equal variances not assumed | .3419 | -8.3717 | -7.0239 |
| COM | Equal variances assumed | .5447 | -18.0580 | -15.9111 |
| | Equal variances not assumed | .5457 | -18.0601 | -15.9090 |
| TCH | Equal variances assumed | .5529 | -14.6303 | -12.4510 |
| | Equal variances not assumed | .5541 | -14.6327 | -12.4485 |

Appendix M

Means and Anovas by Period and Teacher

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SCORE * TEACHER | 420 | 100.0% | 0 | .0% | 420 | 100.0% |

**Report**

SCORE

| TEACHER | Mean | N | Std. Deviation |
|---|---|---|---|
| ACK | 82.0000 | 38 | 13.9807 |
| CAR | 84.9574 | 47 | 14.3632 |
| FOR | 80.0526 | 38 | 15.5302 |
| MAL | 81.5111 | 45 | 13.4005 |
| McCALL | 74.5000 | 2 | 20.5061 |
| NEC | 83.6818 | 22 | 17.2582 |
| ROC | 86.7391 | 46 | 16.2062 |
| SCH | 78.5538 | 65 | 17.2283 |
| SMA | 79.7083 | 24 | 16.1662 |
| VAL | 81.9130 | 46 | 14.5340 |
| VIV | 86.4091 | 44 | 12.4794 |
| WAI | 88.3333 | 3 | 33.8428 |
| Total | 82.5071 | 420 | 15.3776 |

**ANOVA Table[a]**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| SCORE * TEACHER | Between | (Combined) | 3539.807 | 11 | 321.801 |
| | Within Groups | | 95541.171 | 408 | 234.170 |
| | Total | | 99080.979 | 419 | |

**ANOVA Table[a]**

| | | | F | Sig. |
|---|---|---|---|---|
| SCORE * TEACHER | Between Groups | (Combined) | 1.374 | .182 |
| | Within Groups | | | |
| | Total | | | |

a. The grouping variable TEACHER is a string, so the test for linearity cannot be computed.

**Measures of Association**

| | Eta | Eta Squared |
|---|---|---|
| SCORE * TEACHER | .189 | .036 |

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SCORE * PERIOD | 420 | 100.0% | 0 | .0% | 420 | 100.0% |

**Report**

SCORE

| PERIOD | Mean | N | Std. Deviation |
|---|---|---|---|
| 1.00 | 81.6000 | 75 | 15.5971 |
| 2.00 | 79.8710 | 31 | 14.6350 |
| 3.00 | 82.9756 | 41 | 12.8656 |
| 4.00 | 81.9565 | 69 | 14.5415 |
| 5.00 | 83.4603 | 63 | 15.6852 |
| 6.00 | 81.1549 | 71 | 16.9888 |
| 7.00 | 83.2727 | 22 | 16.8330 |
| 8.00 | 86.4167 | 48 | 15.3024 |
| Total | 82.5071 | 420 | 15.3776 |

**ANOVA Table**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| SCORE * PERIOD | Between Groups | (Combined) | 1240.673 | 7 | 177.239 |
| | | Linearity | 490.792 | 1 | 490.792 |
| | | Deviation from Linearity | 749.880 | 6 | 124.980 |
| | Within Groups | | 97840.306 | 412 | 237.476 |
| | Total | | 99080.979 | 419 | |

**ANOVA Table**

| | | | F | Sig. |
|---|---|---|---|---|
| SCORE * PERIOD | Between Groups | (Combined) | .746 | .633 |
| | | Linearity | 2.067 | .151 |
| | | Deviation from Linearity | .526 | .788 |
| | Within Groups | | | |
| | Total | | | |

**Measures of Association**

| | R | R Squared | Eta | Eta Squared |
|---|---|---|---|---|
| SCORE * PERIOD | .070 | .005 | .112 | .013 |

Appendix N

Documentation on Academic Level of English Class

# Frequencies

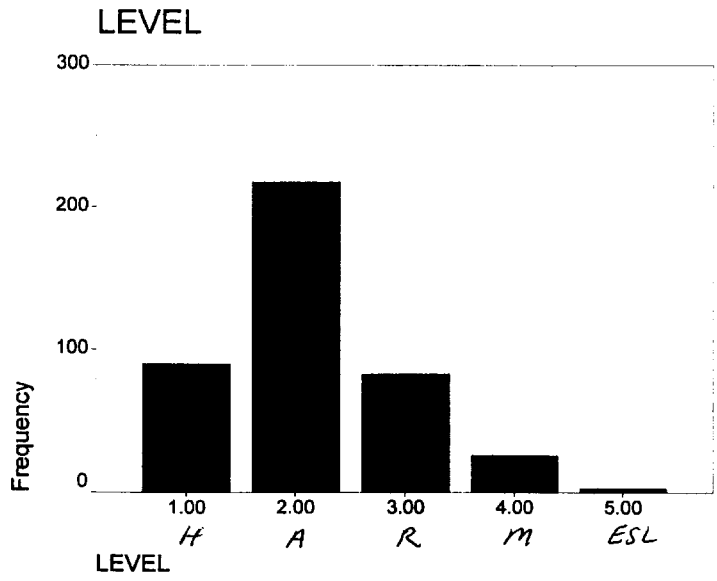
**Statistics**

LEVEL

| | | |
|---|---|---|
| N | Valid | 420 |
| | Missing | 0 |

**LEVEL**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 90 | 21.4 | 21.4 | 21.4 |
| | 2.00 | 218 | 51.9 | 51.9 | 73.3 |
| | 3.00 | 83 | 19.8 | 19.8 | 93.1 |
| | 4.00 | 26 | 6.2 | 6.2 | 99.3 |
| | 5.00 | 3 | .7 | .7 | 100.0 |
| | Total | 420 | 100.0 | 100.0 | |



# Correlations

**Correlations**

| | | LEVEL | SCORE | SAT | COM | TCH | COMPSCOR |
|---|---|---|---|---|---|---|---|
| LEVEL | Pearson Correlation | 1.000 | -.100* | -.103* | -.088 | -.080 | .422** |
| | Sig. (2-tailed) | . | .040 | .034 | .071 | .100 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| SCORE | Pearson Correlation | -.100* | 1.000 | .811** | .931** | .873** | -.290** |
| | Sig. (2-tailed) | .040 | . | .000 | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| SAT | Pearson Correlation | -.103* | .811** | 1.000 | .718** | .552** | -.214** |
| | Sig. (2-tailed) | .034 | .000 | . | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| COM | Pearson Correlation | -.088 | .931** | .718** | 1.000 | .683** | -.259** |
| | Sig. (2-tailed) | .071 | .000 | .000 | . | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| TCH | Pearson Correlation | -.080 | .873** | .552** | .683** | 1.000 | -.277** |
| | Sig. (2-tailed) | .100 | .000 | .000 | .000 | . | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| COMPSCOR | Pearson Correlation | .422** | -.290** | -.214** | -.259** | -.277** | 1.000 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SCORE * LEVEL | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| SAT * LEVEL | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| COM * LEVEL | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| TCH * LEVEL | 420 | 100.0% | 0 | .0% | 420 | 100.0% |

**Report**

| LEVEL | | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|
| A | Mean | 81.4174 | 14.3532 | 31.7936 | 35.2706 |
| | N | 218 | 218 | 218 | 218 |
| | Std. Deviation | 14.7637 | 3.5701 | 7.2340 | 6.0081 |
| ESL | Mean | 88.3333 | 14.3333 | 35.3333 | 38.6667 |
| | N | 3 | 3 | 3 | 3 |
| | Std. Deviation | 33.8428 | 7.0946 | 14.5717 | 13.5769 |
| H | Mean | 86.5778 | 14.9889 | 34.6222 | 36.9667 |
| | N | 90 | 90 | 90 | 90 |
| | Std. Deviation | 14.4245 | 3.3969 | 6.1197 | 6.9322 |
| M | Mean | 79.3077 | 12.8462 | 32.5000 | 33.9615 |
| | N | 26 | 26 | 26 | 26 |
| | Std. Deviation | 16.1016 | 4.1827 | 7.1288 | 6.5634 |
| R | Mean | 81.7470 | 14.3976 | 31.7229 | 35.6265 |
| | N | 83 | 83 | 83 | 83 |
| | Std. Deviation | 16.5004 | 3.9784 | 8.1125 | 6.2989 |
| Total | Mean | 82.5071 | 14.4048 | 32.4548 | 35.6476 |
| | N | 420 | 420 | 420 | 420 |
| | Std. Deviation | 15.3776 | 3.6958 | 7.3065 | 6.3880 |

**ANOVA Table[a]**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| SCORE * LEVEL | Between | (Combined) | 2166.117 | 4 | 541.529 |
| | Within Groups | | 96914.861 | 415 | 233.530 |
| | Total | | 99080.979 | 419 | |
| SAT * LEVEL | Between | (Combined) | 94.468 | 4 | 23.617 |
| | Within Groups | | 5628.722 | 415 | 13.563 |
| | Total | | 5723.190 | 419 | |
| COM * LEVEL | Between | (Combined) | 587.481 | 4 | 146.870 |
| | Within Groups | | 21780.660 | 415 | 52.484 |
| | Total | | 22368.140 | 419 | |
| TCH * LEVEL | Between | (Combined) | 288.866 | 4 | 72.216 |
| | Within Groups | | 16808.982 | 415 | 40.504 |
| | Total | | 17097.848 | 419 | |

**ANOVA Table[a]**

| | | | F | Sig. |
|---|---|---|---|---|
| SCORE * LEVEL | Between Groups | (Combined) | 2.319 | .056 |
| | Within Groups | | | |
| | Total | | | |
| SAT * LEVEL | Between Groups | (Combined) | 1.741 | .140 |
| | Within Groups | | | |
| | Total | | | |
| COM * LEVEL | Between Groups | (Combined) | 2.798 | .026 |
| | Within Groups | | | |
| | Total | | | |
| TCH * LEVEL | Between Groups | (Combined) | 1.783 | .131 |
| | Within Groups | | | |
| | Total | | | |

a. The grouping variable LEVEL is a string, so the test for linearity cannot be computed.

**Measures of Association**

| | Eta | Eta Squared |
|---|---|---|
| SCORE * LEVEL | .148 | .022 |
| SAT * LEVEL | .128 | .017 |
| COM * LEVEL | .162 | .026 |
| TCH * LEVEL | .130 | .017 |

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SCORE * LEVEL | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| SAT * LEVEL | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| COM * LEVEL | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| TCH * LEVEL | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| COMPSCOR * LEVEL | 419 | 99.8% | 1 | .2% | 420 | 100.0% |

**Report**

N

| LEVEL | SCORE | SAT | COM | TCH | COMPSCOR |
|---|---|---|---|---|---|
| 1.00 | 90 | 90 | 90 | 90 | 89 |
| 2.00 | 218 | 218 | 218 | 218 | 218 |
| 3.00 | 83 | 83 | 83 | 83 | 83 |
| 4.00 | 26 | 26 | 26 | 26 | 26 |
| 5.00 | 3 | 3 | 3 | 3 | 3 |
| Total | 420 | 420 | 420 | 420 | 419 |

**ANOVA Table**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| SCORE * LEVEL | Between | (Combined) | 2166.117 | 4 | 541.529 |
| | Within Groups | | 96914.861 | 415 | 233.530 |
| | Total | | 99080.979 | 419 | |
| SAT * LEVEL | Between | (Combined) | 94.468 | 4 | 23.617 |
| | Within Groups | | 5628.722 | 415 | 13.563 |
| | Total | | 5723.190 | 419 | |
| COM * LEVEL | Between | (Combined) | 587.481 | 4 | 146.870 |
| | Within Groups | | 21780.660 | 415 | 52.484 |
| | Total | | 22368.140 | 419 | |
| TCH * LEVEL | Between | (Combined) | 288.866 | 4 | 72.216 |
| | Within Groups | | 16808.982 | 415 | 40.504 |
| | Total | | 17097.848 | 419 | |
| COMPSCOR * LEVEL | Between | (Combined) | 16857.137 | 4 | 4214.284 |
| | Within Groups | | 71016.605 | 414 | 171.538 |
| | Total | | 87873.742 | 418 | |

**ANOVA Table**

| | | | F | Sig. |
|---|---|---|---|---|
| SCORE * LEVEL | Between Groups | (Combined) | 2.319 | .056 |
| | Within Groups | | | |
| | Total | | | |
| SAT * LEVEL | Between Groups | (Combined) | 1.741 | .140 |
| | Within Groups | | | |
| | Total | | | |
| COM * LEVEL | Between Groups | (Combined) | 2.798 | .026 |
| | Within Groups | | | |
| | Total | | | |
| TCH * LEVEL | Between Groups | (Combined) | 1.783 | .131 |
| | Within Groups | | | |
| | Total | | | |
| COMPSCOR * LEVEL | Between Groups | (Combined) | 24.568 | .000 |
| | Within Groups | | | |
| | Total | | | |

**Measures of Association**

| | Eta | Eta Squared |
|---|---|---|
| SCORE * LEVEL | .148 | .022 |
| SAT * LEVEL | .128 | .017 |
| COM * LEVEL | .162 | .026 |
| TCH * LEVEL | .130 | .017 |
| COMPSCOR * LEVEL | .438 | .192 |

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| LEVEL * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |

**LEVEL * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| LEVEL | A | Count | 58 | 54 | 112 |
| | | % within GROUP | 52.7% | 47.8% | 50.2% |
| | ESL | Count | 1 | 1 | 2 |
| | | % within GROUP | .9% | .9% | .9% |
| | H | Count | 15 | 31 | 46 |
| | | % within GROUP | 13.6% | 27.4% | 20.6% |
| | M | Count | 8 | 5 | 13 |
| | | % within GROUP | 7.3% | 4.4% | 5.8% |
| | R | Count | 28 | 22 | 50 |
| | | % within GROUP | 25.5% | 19.5% | 22.4% |
| Total | | Count | 110 | 113 | 223 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 7.081[a] | 4 | .132 |
| Likelihood Ratio | 7.206 | 4 | .125 |
| N of Valid Cases | 223 | | |

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is .99.

Appendix O

Ability Grouping and QSL Score

# Frequencies

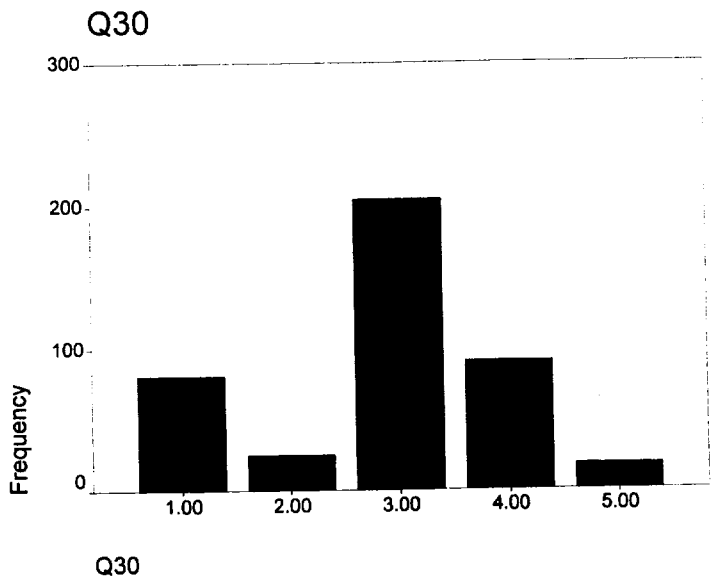
**Statistics**

Q30

| | | |
|---|---|---|
| N | Valid | 420 |
| | Missing | 0 |

**Q30**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 81 | 19.3 | 19.3 | 19.3 |
| | 2.00 | 25 | 6.0 | 6.0 | 25.2 |
| | 3.00 | 205 | 48.8 | 48.8 | 74.0 |
| | 4.00 | 91 | 21.7 | 21.7 | 95.7 |
| | 5.00 | 18 | 4.3 | 4.3 | 100.0 |
| | Total | 420 | 100.0 | 100.0 | |



# Correlations

**Correlations**

| | | LEVELNO | Q30 |
|---|---|---|---|
| LEVELNO | Pearson Correlation | 1.000 | .726** |
| | Sig. (2-tailed) | . | .000 |
| | N | 420 | 420 |
| Q30 | Pearson Correlation | .726** | 1.000 |
| | Sig. (2-tailed) | .000 | . |
| | N | 420 | 420 |

**. Correlation is significant at the 0.01 level (2-tailed).

# Correlations

**Correlations**

| | | Q30 | SCORE | SAT | COM | TCH | COMPSCOR |
|---|---|---|---|---|---|---|---|
| Q30 | Pearson Correlation | 1.000 | -.130** | -.131** | -.130** | -.088 | .414** |
| | Sig. (2-tailed) | . | .008 | .007 | .008 | .073 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| SCORE | Pearson Correlation | -.130** | 1.000 | .811** | .931** | .873** | -.290** |
| | Sig. (2-tailed) | .008 | . | .000 | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| SAT | Pearson Correlation | -.131** | .811** | 1.000 | .718** | .552** | -.214** |
| | Sig. (2-tailed) | .007 | .000 | . | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| COM | Pearson Correlation | -.130** | .931** | .718** | 1.000 | .683** | -.259** |
| | Sig. (2-tailed) | .008 | .000 | .000 | . | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| TCH | Pearson Correlation | -.088 | .873** | .552** | .683** | 1.000 | -.277** |
| | Sig. (2-tailed) | .073 | .000 | .000 | .000 | . | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| COMPSCOR | Pearson Correlation | .414** | -.290** | -.214** | -.259** | -.277** | 1.000 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |

**. Correlation is significant at the 0.01 level (2-tailed).

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SCORE * Q30 | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| SAT * Q30 | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| COM * Q30 | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| TCH * Q30 | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| COMPSCOR * Q30 | 419 | 99.8% | 1 | .2% | 420 | 100.0% |

**Report**

N

| Q30 | SCORE | SAT | COM | TCH | COMPSCOR |
|---|---|---|---|---|---|
| 1.00 | 81 | 81 | 81 | 81 | 81 |
| 2.00 | 25 | 25 | 25 | 25 | 25 |
| 3.00 | 205 | 205 | 205 | 205 | 204 |
| 4.00 | 91 | 91 | 91 | 91 | 91 |
| 5.00 | 18 | 18 | 18 | 18 | 18 |
| Total | 420 | 420 | 420 | 420 | 419 |

**ANOVA Table**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| SCORE * Q30 | Between | (Combined) | 1952.894 | 4 | 488.223 |
| | Within Groups | | 97128.085 | 415 | 234.044 |
| | Total | | 99080.979 | 419 | |
| SAT * Q30 | Between | (Combined) | 155.073 | 4 | 38.768 |
| | Within Groups | | 5568.118 | 415 | 13.417 |
| | Total | | 5723.190 | 419 | |
| COM * Q30 | Between | (Combined) | 568.868 | 4 | 142.217 |
| | Within Groups | | 21799.273 | 415 | 52.528 |
| | Total | | 22368.140 | 419 | |
| TCH * Q30 | Between | (Combined) | 143.199 | 4 | 35.800 |
| | Within Groups | | 16954.649 | 415 | 40.855 |
| | Total | | 17097.848 | 419 | |
| COMPSCOR * Q30 | Between | (Combined) | 21260.997 | 4 | 5315.249 |
| | Within Groups | | 66612.745 | 414 | 160.900 |
| | Total | | 87873.742 | 418 | |

**ANOVA Table**

| | | | F | Sig. |
|---|---|---|---|---|
| SCORE * Q30 | Between Groups | (Combined) | 2.086 | .082 |
| | Within Groups | | | |
| | Total | | | |
| SAT * Q30 | Between Groups | (Combined) | 2.889 | .022 |
| | Within Groups | | | |
| | Total | | | |
| COM * Q30 | Between Groups | (Combined) | 2.707 | .030 |
| | Within Groups | | | |
| | Total | | | |
| TCH * Q30 | Between Groups | (Combined) | .876 | .478 |
| | Within Groups | | | |
| | Total | | | |
| COMPSCOR * Q30 | Between Groups | (Combined) | 33.034 | .000 |
| | Within Groups | | | |
| | Total | | | |

**Measures of Association**

| | Eta | Eta Squared |
|---|---|---|
| SCORE * Q30 | .140 | .020 |
| SAT * Q30 | .165 | .027 |
| COM * Q30 | .159 | .025 |
| TCH * Q30 | .092 | .008 |
| COMPSCOR * Q30 | .492 | .242 |

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q30 * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |

**Q30 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q30 | 1.00 | Count | 16 | 28 | 44 |
| | | % within GROUP | 14.5% | 24.8% | 19.7% |
| | 2.00 | Count | 5 | 7 | 12 |
| | | % within GROUP | 4.5% | 6.2% | 5.4% |
| | 3.00 | Count | 57 | 57 | 114 |
| | | % within GROUP | 51.8% | 50.4% | 51.1% |
| | 4.00 | Count | 27 | 18 | 45 |
| | | % within GROUP | 24.5% | 15.9% | 20.2% |
| | 5.00 | Count | 5 | 3 | 8 |
| | | % within GROUP | 4.5% | 2.7% | 3.6% |
| Total | | Count | 110 | 113 | 223 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 5.867[a] | 4 | .209 |
| Likelihood Ratio | 5.927 | 4 | .205 |
| Linear-by-Linear Association | 5.709 | 1 | .017 |
| N of Valid Cases | 223 | | |

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 3.95.

Appendix P

Gender and QSL Score

# Frequencies

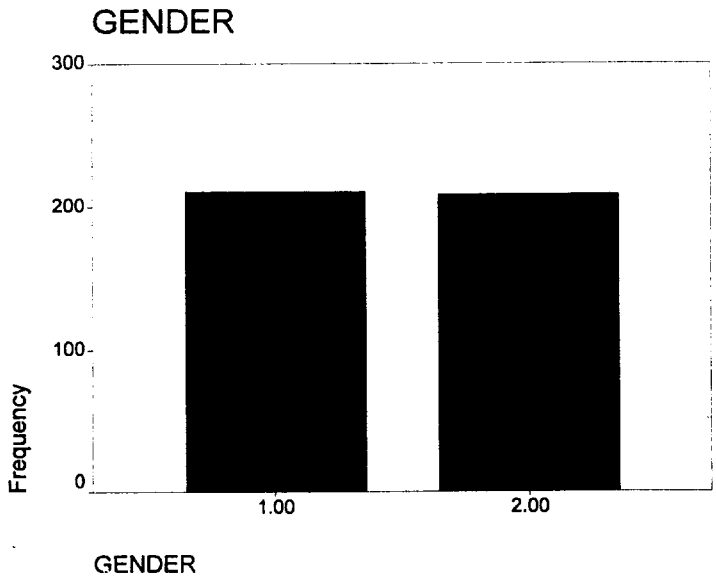
**Statistics**

GENDER

| | | |
|---|---|---|
| N | Valid | 420 |
| | Missing | 0 |

**GENDER**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 211 | 50.2 | 50.2 | 50.2 |
| | 2.00 | 209 | 49.8 | 49.8 | 100.0 |
| | Total | 420 | 100.0 | 100.0 | |



# Correlations

**Correlations**

| | | GENDER | SCORE | SAT | COM | TCH | COMPSCOR |
|---|---|---|---|---|---|---|---|
| GENDER | Pearson Correlation | 1.000 | .022 | .086 | .033 | -.035 | -.041 |
| | Sig. (2-tailed) | . | .657 | .080 | .505 | .480 | .402 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| SCORE | Pearson Correlation | .022 | 1.000 | .811** | .931** | .873** | -.290** |
| | Sig. (2-tailed) | .657 | . | .000 | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| SAT | Pearson Correlation | .086 | .811** | 1.000 | .718** | .552** | -.214** |
| | Sig. (2-tailed) | .080 | .000 | . | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| COM | Pearson Correlation | .033 | .931** | .718** | 1.000 | .683** | -.259** |
| | Sig. (2-tailed) | .505 | .000 | .000 | . | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| TCH | Pearson Correlation | -.035 | .873** | .552** | .683** | 1.000 | -.277** |
| | Sig. (2-tailed) | .480 | .000 | .000 | .000 | . | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| COMPSCOR | Pearson Correlation | -.041 | -.290** | -.214** | -.259** | -.277** | 1.000 |
| | Sig. (2-tailed) | .402 | .000 | .000 | .000 | .000 | . |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |

**. Correlation is significant at the 0.01 level (2-tailed).

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SCORE * Q28SEX | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| SAT * Q28SEX | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| COM * Q28SEX | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| TCH * Q28SEX | 420 | 100.0% | 0 | .0% | 420 | 100.0% |

**Report**

| Q28SEX | | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|
| f | Mean | 82.8421 | 14.7225 | 32.6938 | 35.4258 |
| | N | 209 | 209 | 209 | 209 |
| | Std. Deviation | 14.5592 | 3.5436 | 6.9339 | 6.1179 |
| m | Mean | 82.1754 | 14.0900 | 32.2180 | 35.8673 |
| | N | 211 | 211 | 211 | 211 |
| | Std. Deviation | 16.1753 | 3.8230 | 7.6669 | 6.6520 |
| Total | Mean | 82.5071 | 14.4048 | 32.4548 | 35.6476 |
| | N | 420 | 420 | 420 | 420 |
| | Std. Deviation | 15.3776 | 3.6958 | 7.3065 | 6.3880 |

**ANOVA Table**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| SCORE * Q28SEX | Between | (Combined) | 46.677 | 1 | 46.677 |
| | Within Groups | | 99034.301 | 418 | 236.924 |
| | Total | | 99080.979 | 419 | |
| SAT * Q28SEX | Between | (Combined) | 41.997 | 1 | 41.997 |
| | Within Groups | | 5681.193 | 418 | 13.591 |
| | Total | | 5723.190 | 419 | |
| COM * Q28SEX | Between | (Combined) | 23.767 | 1 | 23.767 |
| | Within Groups | | 22344.373 | 418 | 53.455 |
| | Total | | 22368.140 | 419 | |
| TCH * Q28SEX | Between | (Combined) | 20.463 | 1 | 20.463 |
| | Within Groups | | 17077.385 | 418 | 40.855 |
| | Total | | 17097.848 | 419 | |

**ANOVA Table**

| | | | F | Sig. |
|---|---|---|---|---|
| SCORE * Q28SEX | Between | (Combined) | .197 | .657 |
| | Within Groups | | | |
| | Total | | | |
| SAT * Q28SEX | Between | (Combined) | 3.090 | .080 |
| | Within Groups | | | |
| | Total | | | |
| COM * Q28SEX | Between | (Combined) | .445 | .505 |
| | Within Groups | | | |
| | Total | | | |
| TCH * Q28SEX | Between | (Combined) | .501 | .480 |
| | Within Groups | | | |
| | Total | | | |

**Measures of Association**

| | Eta | Eta Squared |
|---|---|---|
| SCORE * Q28SEX | .022 | .000 |
| SAT * Q28SEX | .086 | .007 |
| COM * Q28SEX | .033 | .001 |
| TCH * Q28SEX | .035 | .001 |

# T-Test

**Group Statistics**

| | GENDER | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| SCORE | 1.00 | 211 | 82.1754 | 16.1753 | 1.1136 |
| | 2.00 | 209 | 82.8421 | 14.5592 | 1.0071 |
| SAT | 1.00 | 211 | 14.0900 | 3.8230 | .2632 |
| | 2.00 | 209 | 14.7225 | 3.5436 | .2451 |
| COM | 1.00 | 211 | 32.2180 | 7.6669 | .5278 |
| | 2.00 | 209 | 32.6938 | 6.9339 | .4796 |
| TCH | 1.00 | 211 | 35.8673 | 6.6520 | .4579 |
| | 2.00 | 209 | 35.4258 | 6.1179 | .4232 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | |
|---|---|---|---|
| | | F | Sig. |
| SCORE | Equal variances assumed | 2.110 | .147 |
| | Equal variances not assumed | | |
| SAT | Equal variances assumed | 2.814 | .094 |
| | Equal variances not assumed | | |
| COM | Equal variances assumed | 3.091 | .079 |
| | Equal variances not assumed | | |
| TCH | Equal variances assumed | 3.223 | .073 |
| | Equal variances not assumed | | |

**Independent Samples Test**

| | | t-test for Equality of Means | | | |
|---|---|---|---|---|---|
| | | t | df | Sig. (2-tailed) | Mean Difference |
| SCORE | Equal variances assumed | -.444 | 418 | .657 | -.6667 |
| | Equal variances not assumed | -.444 | 414.232 | .657 | -.6667 |
| SAT | Equal variances assumed | -1.758 | 418 | .080 | -.6324 |
| | Equal variances not assumed | -1.758 | 416.174 | .079 | -.6324 |
| COM | Equal variances assumed | -.667 | 418 | .505 | -.4758 |
| | Equal variances not assumed | -.667 | 414.593 | .505 | -.4758 |
| TCH | Equal variances assumed | .708 | 418 | .480 | .4415 |
| | Equal variances not assumed | .708 | 415.724 | .479 | .4415 |

**Independent Samples Test**

| | | t-test for Equality of Means | | |
|---|---|---|---|---|
| | | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | Lower | Upper |
| SCORE | Equal variances assumed | 1.5022 | -3.6195 | 2.2860 |
| | Equal variances not assumed | 1.5014 | -3.6181 | 2.2846 |
| SAT | Equal variances assumed | .3598 | -1.3397 | 7.477E-02 |
| | Equal variances not assumed | .3597 | -1.3394 | 7.452E-02 |
| COM | Equal variances assumed | .7135 | -1.8783 | .9268 |
| | Equal variances not assumed | .7132 | -1.8777 | .9261 |
| TCH | Equal variances assumed | .6238 | -.7847 | 1.6676 |
| | Equal variances not assumed | .6235 | -.7842 | 1.6671 |

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q28SEX * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |

**Q28SEX * GROUP Crosstabulation**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| Q28SEX | f | Count | 53 | 54 | 107 |
| | | % within GROUP | 48.2% | 47.8% | 48.0% |
| | m | Count | 57 | 59 | 116 |
| | | % within GROUP | 51.8% | 52.2% | 52.0% |
| Total | | Count | 110 | 113 | 223 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | .003[b] | 1 | .953 | | |
| Continuity Correction[a] | .000 | 1 | 1.000 | | |
| Likelihood Ratio | .003 | 1 | .953 | | |
| Fisher's Exact Test | | | | 1.000 | .530 |
| N of Valid Cases | 223 | | | | |

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 52.78.

Appendix Q

Race and QSL Score

# Frequencies

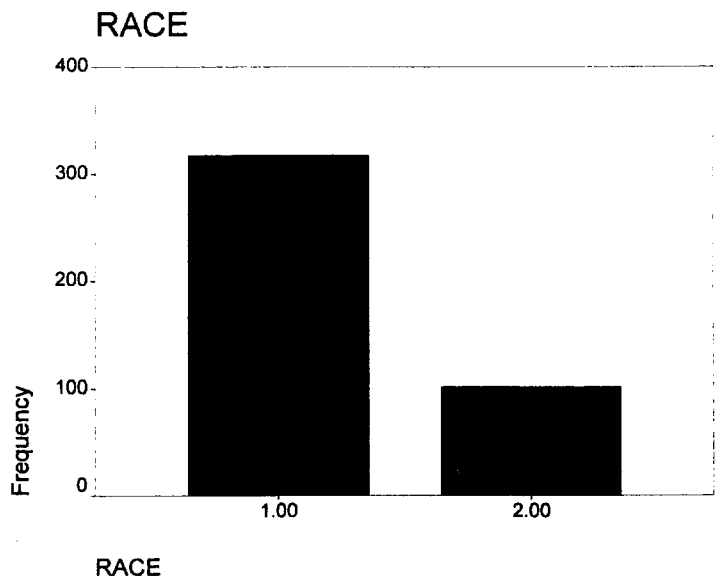
**Statistics**

RACE

| | | |
|---|---|---|
| N | Valid | 420 |
| | Missing | 0 |

**RACE**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 318 | 75.7 | 75.7 | 75.7 |
| | 2.00 | 102 | 24.3 | 24.3 | 100.0 |
| | Total | 420 | 100.0 | 100.0 | |



# Correlations

**Correlations**

| | | RACE | SCORE | SAT | COM | TCH | COMPSCOR |
|---|---|---|---|---|---|---|---|
| RACE | Pearson Correlation | 1.000 | .066 | .057 | .077 | .037 | -.037 |
| | Sig. (2-tailed) | . | .178 | .246 | .114 | .445 | .453 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| SCORE | Pearson Correlation | .066 | 1.000 | .811** | .931** | .873** | -.290** |
| | Sig. (2-tailed) | .178 | . | .000 | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| SAT | Pearson Correlation | .057 | .811** | 1.000 | .718** | .552** | -.214** |
| | Sig. (2-tailed) | .246 | .000 | . | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| COM | Pearson Correlation | .077 | .931** | .718** | 1.000 | .683** | -.259** |
| | Sig. (2-tailed) | .114 | .000 | .000 | . | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| TCH | Pearson Correlation | .037 | .873** | .552** | .683** | 1.000 | -.277** |
| | Sig. (2-tailed) | .445 | .000 | .000 | .000 | . | .000 |
| | N | 420 | 420 | 420 | 420 | 420 | 419 |
| COMPSCOR | Pearson Correlation | -.037 | -.290** | -.214** | -.259** | -.277** | 1.000 |
| | Sig. (2-tailed) | .453 | .000 | .000 | .000 | .000 | . |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |

**. Correlation is significant at the 0.01 level (2-tailed).

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SCORE * RACE | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| SAT * RACE | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| COM * RACE | 420 | 100.0% | 0 | .0% | 420 | 100.0% |
| TCH * RACE | 420 | 100.0% | 0 | .0% | 420 | 100.0% |

**Report**

| RACE | | SCORE | SAT | COM | TCH |
|---|---|---|---|---|---|
| 1.00 | Mean | 81.9340 | 14.2862 | 32.1352 | 35.5126 |
| | N | 318 | 318 | 318 | 318 |
| | Std. Deviation | 15.5693 | 3.7673 | 7.4171 | 6.3820 |
| 2.00 | Mean | 84.2941 | 14.7745 | 33.4510 | 36.0686 |
| | N | 102 | 102 | 102 | 102 |
| | Std. Deviation | 14.6946 | 3.4552 | 6.8904 | 6.4197 |
| Total | Mean | 82.5071 | 14.4048 | 32.4548 | 35.6476 |
| | N | 420 | 420 | 420 | 420 |
| | Std. Deviation | 15.3776 | 3.6958 | 7.3065 | 6.3880 |

**ANOVA Table**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| SCORE * RACE | Between | (Combined) | 430.189 | 1 | 430.189 |
| | Within Groups | | 98650.790 | 418 | 236.007 |
| | Total | | 99080.979 | 419 | |
| SAT * RACE | Between | (Combined) | 18.418 | 1 | 18.418 |
| | Within Groups | | 5704.773 | 418 | 13.648 |
| | Total | | 5723.190 | 419 | |
| COM * RACE | Between | (Combined) | 133.700 | 1 | 133.700 |
| | Within Groups | | 22234.440 | 418 | 53.192 |
| | Total | | 22368.140 | 419 | |
| TCH * RACE | Between | (Combined) | 23.878 | 1 | 23.878 |
| | Within Groups | | 17073.969 | 418 | 40.847 |
| | Total | | 17097.848 | 419 | |

**ANOVA Table**

| | | | F | Sig. |
|---|---|---|---|---|
| SCORE * RACE | Between | (Combined) | 1.823 | .178 |
| | Within Groups | | | |
| | Total | | | |
| SAT * RACE | Between | (Combined) | 1.349 | .246 |
| | Within Groups | | | |
| | Total | | | |
| COM * RACE | Between | (Combined) | 2.514 | .114 |
| | Within Groups | | | |
| | Total | | | |
| TCH * RACE | Between | (Combined) | .585 | .445 |
| | Within Groups | | | |
| | Total | | | |

**Measures of Association**

| | Eta | Eta Squared |
|---|---|---|
| SCORE * RACE | .066 | .004 |
| SAT * RACE | .057 | .003 |
| COM * RACE | .077 | .006 |
| TCH * RACE | .037 | .001 |

# T-Test

**Group Statistics**

| | RACE | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| SCORE | 1.00 | 318 | 81.9340 | 15.5693 | .8731 |
| | 2.00 | 102 | 84.2941 | 14.6946 | 1.4550 |
| SAT | 1.00 | 318 | 14.2862 | 3.7673 | .2113 |
| | 2.00 | 102 | 14.7745 | 3.4552 | .3421 |
| COM | 1.00 | 318 | 32.1352 | 7.4171 | .4159 |
| | 2.00 | 102 | 33.4510 | 6.8904 | .6823 |
| TCH | 1.00 | 318 | 35.5126 | 6.3820 | .3579 |
| | 2.00 | 102 | 36.0686 | 6.4197 | .6356 |
| COMPSCOR | 1.00 | 317 | 22.8864 | 13.5114 | .7589 |
| | 2.00 | 102 | 21.6471 | 17.2539 | 1.7084 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | |
|---|---|---|---|
| | | F | Sig. |
| SCORE | Equal variances assumed | .584 | .445 |
| | Equal variances not assumed | | |
| SAT | Equal variances assumed | 2.739 | .099 |
| | Equal variances not assumed | | |
| COM | Equal variances assumed | 1.277 | .259 |
| | Equal variances not assumed | | |
| TCH | Equal variances assumed | .019 | .891 |
| | Equal variances not assumed | | |
| COMPSCOR | Equal variances assumed | .594 | .441 |
| | Equal variances not assumed | | |

**Independent Samples Test**

| | | t-test for Equality of Means | | | |
|---|---|---|---|---|---|
| | | t | df | Sig. (2-tailed) | Mean Difference |
| SCORE | Equal variances assumed | -1.350 | 418 | .178 | -2.3602 |
| | Equal variances not assumed | -1.391 | 179.418 | .166 | -2.3602 |
| SAT | Equal variances assumed | -1.162 | 418 | .246 | -.4883 |
| | Equal variances not assumed | -1.215 | 184.175 | .226 | -.4883 |
| COM | Equal variances assumed | -1.585 | 418 | .114 | -1.3158 |
| | Equal variances not assumed | -1.647 | 182.017 | .101 | -1.3158 |
| TCH | Equal variances assumed | -.765 | 418 | .445 | -.5560 |
| | Equal variances not assumed | -.762 | 169.748 | .447 | -.5560 |
| COMPSCOR | Equal variances assumed | .751 | 417 | .453 | 1.2394 |
| | Equal variances not assumed | .663 | 143.011 | .508 | 1.2394 |

**Independent Samples Test**

| | | t-test for Equality of Means | | |
|---|---|---|---|---|
| | | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | Lower | Upper |
| SCORE | Equal variances assumed | 1.7481 | -5.7964 | 1.0761 |
| | Equal variances not assumed | 1.6968 | -5.7085 | .9882 |
| SAT | Equal variances assumed | .4204 | -1.3147 | .3380 |
| | Equal variances not assumed | .4021 | -1.2816 | .3049 |
| COM | Equal variances assumed | .8299 | -2.9471 | .3156 |
| | Equal variances not assumed | .7990 | -2.8923 | .2608 |
| TCH | Equal variances assumed | .7273 | -1.9856 | .8735 |
| | Equal variances not assumed | .7295 | -1.9961 | .8840 |
| COMPSCOR | Equal variances assumed | 1.6514 | -2.0067 | 4.4854 |
| | Equal variances not assumed | 1.8594 | -2.4558 | 4.9345 |

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| RACE * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |

**RACE * GROUP Crosstabulation**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| RACE | 1.00 | Count | 90 | 80 | 170 |
| | | % within GROUP | 81.8% | 70.8% | 76.2% |
| | 2.00 | Count | 20 | 33 | 53 |
| | | % within GROUP | 18.2% | 29.2% | 23.8% |
| Total | | Count | 110 | 113 | 223 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | 3.737[b] | 1 | .053 | | |
| Continuity Correction[a] | 3.154 | 1 | .076 | | |
| Likelihood Ratio | 3.770 | 1 | .052 | | |
| Fisher's Exact Test | | | | .060 | .038 |
| Linear-by-Linear Association | 3.720 | 1 | .054 | | |
| N of Valid Cases | 223 | | | | |

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.14.

Appendix R

School District History and QSL Score

# Frequencies

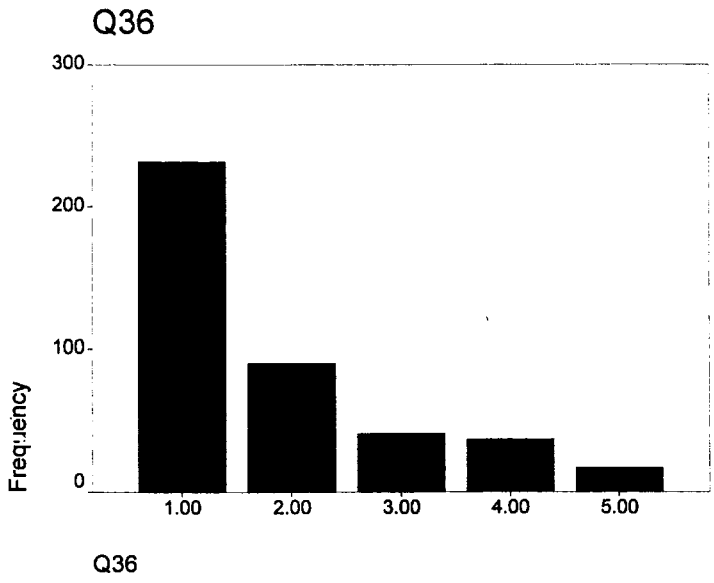
**Statistics**

Q36

| | | |
|---|---|---|
| N | Valid | 417 |
| | Missing | 3 |

**Q36**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 232 | 55.2 | 55.6 | 55.6 |
| | 2.00 | 90 | 21.4 | 21.6 | 77.2 |
| | 3.00 | 41 | 9.8 | 9.8 | 87.1 |
| | 4.00 | 37 | 8.8 | 8.9 | 95.9 |
| | 5.00 | 17 | 4.0 | 4.1 | 100.0 |
| | Total | 417 | 99.3 | 100.0 | |
| Missing | System | 3 | .7 | | |
| Total | | 420 | 100.0 | | |



# Correlations

**Correlations**

| | | Q36 | SCORE | SAT | COM | TCH | COMPSCOR |
|---|---|---|---|---|---|---|---|
| Q36 | Pearson Correlation | 1.000 | .130** | .049 | .129** | .136** | .090 |
| | Sig. (2-tailed) | . | .008 | .314 | .008 | .005 | .067 |
| | N | 417 | 417 | 417 | 417 | 417 | 416 |
| SCORE | Pearson Correlation | .130** | 1.000 | .811** | .931** | .873** | -.290** |
| | Sig. (2-tailed) | .008 | . | .000 | .000 | .000 | .000 |
| | N | 417 | 420 | 420 | 420 | 420 | 419 |
| SAT | Pearson Correlation | .049 | .811** | 1.000 | .718** | .552** | -.214** |
| | Sig. (2-tailed) | .314 | .000 | . | .000 | .000 | .000 |
| | N | 417 | 420 | 420 | 420 | 420 | 419 |
| COM | Pearson Correlation | .129** | .931** | .718** | 1.000 | .683** | -.259** |
| | Sig. (2-tailed) | .008 | .000 | .000 | . | .000 | .000 |
| | N | 417 | 420 | 420 | 420 | 420 | 419 |
| TCH | Pearson Correlation | .136** | .873** | .552** | .683** | 1.000 | -.277** |
| | Sig. (2-tailed) | .005 | .000 | .000 | .000 | . | .000 |
| | N | 417 | 420 | 420 | 420 | 420 | 419 |
| COMPSCOR | Pearson Correlation | .090 | -.290** | -.214** | -.259** | -.277** | 1.000 |
| | Sig. (2-tailed) | .067 | .000 | .000 | .000 | .000 | . |
| | N | 416 | 419 | 419 | 419 | 419 | 419 |

**. Correlation is significant at the 0.01 level (2-tailed).

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SCORE * Q36 | 417 | 99.3% | 3 | .7% | 420 | 100.0% |
| SAT * Q36 | 417 | 99.3% | 3 | .7% | 420 | 100.0% |
| COM * Q36 | 417 | 99.3% | 3 | .7% | 420 | 100.0% |
| TCH * Q36 | 417 | 99.3% | 3 | .7% | 420 | 100.0% |
| COMPSCOR * Q36 | 416 | 99.0% | 4 | 1.0% | 420 | 100.0% |

**Report**

N

| Q36 | SCORE | SAT | COM | TCH | COMPSCOR |
|---|---|---|---|---|---|
| 1.00 | 232 | 232 | 232 | 232 | 231 |
| 2.00 | 90 | 90 | 90 | 90 | 90 |
| 3.00 | 41 | 41 | 41 | 41 | 41 |
| 4.00 | 37 | 37 | 37 | 37 | 37 |
| 5.00 | 17 | 17 | 17 | 17 | 17 |
| Total | 417 | 417 | 417 | 417 | 416 |

**ANOVA Table**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| SCORE * Q36 | Between | (Combined) | 1770.165 | 4 | 442.541 |
| | Within Groups | | 96423.351 | 412 | 234.037 |
| | Total | | 98193.516 | 416 | |
| SAT * Q36 | Between | (Combined) | 18.859 | 4 | 4.715 |
| | Within Groups | | 5605.837 | 412 | 13.606 |
| | Total | | 5624.695 | 416 | |
| COM * Q36 | Between | (Combined) | 377.614 | 4 | 94.403 |
| | Within Groups | | 21640.463 | 412 | 52.525 |
| | Total | | 22018.077 | 416 | |
| TCH * Q36 | Between | (Combined) | 433.293 | 4 | 108.323 |
| | Within Groups | | 16656.981 | 412 | 40.430 |
| | Total | | 17090.273 | 416 | |
| COMPSCOR * Q36 | Between | (Combined) | 904.789 | 4 | 226.197 |
| | Within Groups | | 86710.557 | 411 | 210.975 |
| | Total | | 87615.346 | 415 | |

**ANOVA Table**

| | | | F | Sig. |
|---|---|---|---|---|
| SCORE * Q36 | Between Groups | (Combined) | 1.891 | .111 |
| | Within Groups | | | |
| | Total | | | |
| SAT * Q36 | Between Groups | (Combined) | .347 | .846 |
| | Within Groups | | | |
| | Total | | | |
| COM * Q36 | Between Groups | (Combined) | 1.797 | .128 |
| | Within Groups | | | |
| | Total | | | |
| TCH * Q36 | Between Groups | (Combined) | 2.679 | .031 |
| | Within Groups | | | |
| | Total | | | |
| COMPSCOR * Q36 | Between Groups | (Combined) | 1.072 | .370 |
| | Within Groups | | | |
| | Total | | | |

**Measures of Association**

| | Eta | Eta Squared |
|---|---|---|
| SCORE * Q36 | .134 | .018 |
| SAT * Q36 | .058 | .003 |
| COM * Q36 | .131 | .017 |
| TCH * Q36 | .159 | .025 |
| COMPSCOR * Q36 | .102 | .010 |

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q36 * GROUP | 221 | 52.6% | 199 | 47.4% | 420 | 100.0% |

**Q36 * GROUP Crosstabulation**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| Q36 | 1.00 | Count | 63 | 50 | 113 |
| | | % within GROUP | 57.8% | 44.6% | 51.1% |
| | 2.00 | Count | 29 | 28 | 57 |
| | | % within GROUP | 26.6% | 25.0% | 25.8% |
| | 3.00 | Count | 7 | 14 | 21 |
| | | % within GROUP | 6.4% | 12.5% | 9.5% |
| | 4.00 | Count | 7 | 12 | 19 |
| | | % within GROUP | 6.4% | 10.7% | 8.6% |
| | 5.00 | Count | 3 | 8 | 11 |
| | | % within GROUP | 2.8% | 7.1% | 5.0% |
| Total | | Count | 109 | 112 | 221 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 7.396[a] | 4 | .116 |
| Likelihood Ratio | 7.544 | 4 | .110 |
| Linear-by-Linear Association | 6.651 | 1 | .010 |
| N of Valid Cases | 221 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.43.

Appendix S

Correlations, Crosstabs, and Chi Squares on Literature Variables

# Correlations

**Correlations**

| | | SCORE | SAT | COM | TCH | LITSCORE | Q32 2 |
|---|---|---|---|---|---|---|---|
| SCORE | Pearson Correlation | 1.000 | .811** | .931** | .873** | .590** | .171** |
| | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 403 | 418 |
| SAT | Pearson Correlation | .811** | 1.000 | .718** | .552** | .453** | .153** |
| | Sig. (2-tailed) | .000 | . | .000 | .000 | .000 | .002 |
| | N | 420 | 420 | 420 | 420 | 403 | 418 |
| COM | Pearson Correlation | .931** | .718** | 1.000 | .683** | .520** | .159** |
| | Sig. (2-tailed) | .000 | .000 | . | .000 | .000 | .001 |
| | N | 420 | 420 | 420 | 420 | 403 | 418 |
| TCH | Pearson Correlation | .873** | .552** | .683** | 1.000 | .564** | .142** |
| | Sig. (2-tailed) | .000 | .000 | .000 | . | .000 | .004 |
| | N | 420 | 420 | 420 | 420 | 403 | 418 |
| LITSCORE | Pearson Correlation | .590** | .453** | .520** | .564** | 1.000 | .518** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . | .000 |
| | N | 403 | 403 | 403 | 403 | 403 | 403 |
| Q32 2 | Pearson Correlation | .171** | .153** | .159** | .142** | .518** | 1.000 |
| | Sig. (2-tailed) | .000 | .002 | .001 | .004 | .000 | . |
| | N | 418 | 418 | 418 | 418 | 403 | 418 |
| Q34 1 | Pearson Correlation | .220** | .221** | .194** | .180** | .446** | .240** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 416 | 416 | 416 | 416 | 403 | 416 |
| Q35 | Pearson Correlation | .155** | .145** | .140** | .130** | .285** | -.015 |
| | Sig. (2-tailed) | .001 | .003 | .004 | .008 | .000 | .767 |
| | N | 417 | 417 | 417 | 417 | 403 | 417 |
| Q40 1 | Pearson Correlation | .363** | .201** | .302** | .411** | .502** | .080 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .101 |
| | N | 419 | 419 | 419 | 419 | 403 | 418 |
| Q46 1 | Pearson Correlation | .158** | .122* | .152** | .136** | .326** | .258** |
| | Sig. (2-tailed) | .001 | .013 | .002 | .005 | .000 | .000 |
| | N | 418 | 418 | 418 | 418 | 403 | 417 |
| Q49 | Pearson Correlation | .121* | .107* | .113* | .101* | .253** | .133** |
| | Sig. (2-tailed) | .014 | .031 | .022 | .041 | .000 | .007 |
| | N | 410 | 410 | 410 | 410 | 403 | 410 |
| Q51 1 | Pearson Correlation | .263** | .214** | .243** | .231** | .565** | .126* |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .010 |
| | N | 417 | 417 | 417 | 417 | 403 | 416 |
| Q52 5 | Pearson Correlation | .451** | .337** | .383** | .453** | .538** | .101* |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .039 |
| | N | 415 | 415 | 415 | 415 | 403 | 414 |
| Q54 1 | Pearson Correlation | .221** | .185** | .205** | .192** | .339** | .056 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .258 |
| | N | 415 | 415 | 415 | 415 | 403 | 414 |
| Q57 1 | Pearson Correlation | .566** | .406** | .480** | .578** | .600** | .164** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .001 |
| | N | 419 | 419 | 419 | 419 | 403 | 417 |

**Correlations**

| | | | Q34 1 | Q35 | Q40 1 | Q46 1 | Q49 | Q51 1 |
|---|---|---|---|---|---|---|---|---|
| SCORE | | Pearson Correlation | .220** | .155** | .363** | .158** | .121* | .263** |
| | | Sig. (2-tailed) | .000 | .001 | .000 | .001 | .014 | .000 |
| | | N | 416 | 417 | 419 | 418 | 410 | 417 |
| SAT | | Pearson Correlation | .221** | .145** | .201** | .122* | .107* | .214** |
| | | Sig. (2-tailed) | .000 | .003 | .000 | .013 | .031 | .000 |
| | | N | 416 | 417 | 419 | 418 | 410 | 417 |
| COM | | Pearson Correlation | .194** | .140** | .302** | .152** | .113* | .243** |
| | | Sig. (2-tailed) | .000 | .004 | .000 | .002 | .022 | .000 |
| | | N | 416 | 417 | 419 | 418 | 410 | 417 |
| TCH | | Pearson Correlation | .180** | .130** | .411** | .136** | .101* | .231** |
| | | Sig. (2-tailed) | .000 | .008 | .000 | .005 | .041 | .000 |
| | | N | 416 | 417 | 419 | 418 | 410 | 417 |
| LITSCORE | | Pearson Correlation | .446** | .285** | .502** | .326** | .253** | .565** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 403 | 403 | 403 | 403 | 403 | 403 |
| Q32 | 2 | Pearson Correlation | .240** | -.015 | .080 | .258 | .133** | .126* |
| | | Sig. (2-tailed) | .000 | .767 | .101 | .000 | .007 | .010 |
| | | N | 416 | 417 | 418 | 417 | 410 | 416 |
| Q34 | 1 | Pearson Correlation | 1.000 | .061 | .065 | .038 | .025 | .150** |
| | | Sig. (2-tailed) | . | .215 | .187 | .438 | .621 | .002 |
| | | N | 416 | 416 | 416 | 415 | 409 | 415 |
| Q35 | | Pearson Correlation | .061 | 1.000 | .096* | -.056 | .000 | .100* |
| | | Sig. (2-tailed) | .215 | . | .049 | .257 | .993 | .041 |
| | | N | 416 | 417 | 417 | 416 | 410 | 415 |
| Q40 | 1 | Pearson Correlation | .065 | .096* | 1.000 | .049 | .033 | .171** |
| | | Sig. (2-tailed) | .187 | .049 | . | .321 | .510 | .000 |
| | | N | 416 | 417 | 419 | 418 | 410 | 417 |
| Q46 | 1 | Pearson Correlation | .038 | -.056 | .049 | 1.000 | .064 | .152** |
| | | Sig. (2-tailed) | .438 | .257 | .321 | . | .194 | .002 |
| | | N | 415 | 416 | 418 | 418 | 410 | 417 |
| Q49 | | Pearson Correlation | .025 | .000 | .033 | .064 | 1.000 | .035 |
| | | Sig. (2-tailed) | .621 | .993 | .510 | .194 | . | .484 |
| | | N | 409 | 410 | 410 | 410 | 410 | 409 |
| Q51 | 1 | Pearson Correlation | .150** | .100* | .171** | .152** | .035 | 1.000 |
| | | Sig. (2-tailed) | .002 | .041 | .000 | .002 | .484 | . |
| | | N | 415 | 415 | 417 | 417 | 409 | 417 |
| Q52 | 5 | Pearson Correlation | .111* | .076 | .340** | .086 | .031 | .178** |
| | | Sig. (2-tailed) | .025 | .124 | .000 | .079 | .529 | .000 |
| | | N | 412 | 413 | 415 | 415 | 407 | 414 |
| Q54 | 1 | Pearson Correlation | .034 | .035 | .075 | .018 | .029 | .081 |
| | | Sig. (2-tailed) | .491 | .477 | .128 | .710 | .559 | .102 |
| | | N | 412 | 413 | 415 | 415 | 407 | 414 |
| Q57 | 1 | Pearson Correlation | .175** | .101* | .411** | .139** | .034 | .155** |
| | | Sig. (2-tailed) | .000 | .039 | .000 | .004 | .487 | .001 |
| | | N | 415 | 416 | 418 | 418 | 410 | 417 |

**Correlations**

| | | | Q52 5 | Q54 1 | Q57 1 |
|---|---|---|---|---|---|
| SCORE | | Pearson Correlation | .451** | .221** | .566** |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 415 | 415 | 419 |
| SAT | | Pearson Correlation | .337** | .185** | .406** |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 415 | 415 | 419 |
| COM | | Pearson Correlation | .383** | .205** | .480** |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 415 | 415 | 419 |
| TCH | | Pearson Correlation | .453** | .192** | .578** |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 415 | 415 | 419 |
| LITSCORE | | Pearson Correlation | .538** | .339** | .600** |
| | | Sig. (2-tailed) | .000 | .000 | .000 |
| | | N | 403 | 403 | 403 |
| Q32 | 2 | Pearson Correlation | .101* | .056 | .164** |
| | | Sig. (2-tailed) | .039 | .258 | .001 |
| | | N | 414 | 414 | 417 |
| Q34 | 1 | Pearson Correlation | .111* | .034 | .175** |
| | | Sig. (2-tailed) | .025 | .491 | .000 |
| | | N | 412 | 412 | 415 |
| Q35 | | Pearson Correlation | .076 | .035 | .101* |
| | | Sig. (2-tailed) | .124 | .477 | .039 |
| | | N | 413 | 413 | 416 |
| Q40 | 1 | Pearson Correlation | .340** | .075 | .411** |
| | | Sig. (2-tailed) | .000 | .128 | .000 |
| | | N | 415 | 415 | 418 |
| Q46 | 1 | Pearson Correlation | .086 | .018 | .139** |
| | | Sig. (2-tailed) | .079 | .710 | .004 |
| | | N | 415 | 415 | 418 |
| Q49 | | Pearson Correlation | .031 | .029 | .034 |
| | | Sig. (2-tailed) | .529 | .559 | .487 |
| | | N | 407 | 407 | 410 |
| Q51 | 1 | Pearson Correlation | .178** | .081 | .155** |
| | | Sig. (2-tailed) | .000 | .102 | .001 |
| | | N | 414 | 414 | 417 |
| Q52 | 5 | Pearson Correlation | 1.000 | .113* | .397** |
| | | Sig. (2-tailed) | . | .022 | .000 |
| | | N | 415 | 412 | 415 |
| Q54 | 1 | Pearson Correlation | .113* | 1.000 | .122* |
| | | Sig. (2-tailed) | .022 | . | .013 |
| | | N | 412 | 415 | 415 |
| Q57 | 1 | Pearson Correlation | .397** | .122* | 1.000 |
| | | Sig. (2-tailed) | .000 | .013 | . |
| | | N | 415 | 415 | 419 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q57 | 1 * GROUP | 222 | 52.9% | 198 | 47.1% | 420 | 100.0% |

**Q57 1 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q57 1 | 1.00 | Count | 45 | 3 | 48 |
| | | % within GROUP | 41.3% | 2.7% | 21.6% |
| | 3.00 | Count | 47 | 17 | 64 |
| | | % within GROUP | 43.1% | 15.0% | 28.8% |
| | 5.00 | Count | 17 | 93 | 110 |
| | | % within GROUP | 15.6% | 82.3% | 49.5% |
| Total | | Count | 109 | 113 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 103.283[a] | 2 | .000 |
| Likelihood Ratio | 116.434 | 2 | .000 |
| Linear-by-Linear Association | 96.702 | 1 | .000 |
| N of Valid Cases | 222 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 23.57.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q52 | 5 * GROUP | 220 | 52.4% | 200 | 47.6% | 420 | 100.0% |

**Q52 5 * GROUP Crosstabulation**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| Q52 5 | 1.00 | Count | 25 | 3 | 28 |
| | | % within GROUP | 23.1% | 2.7% | 12.7% |
| | 3.00 | Count | 48 | 13 | 61 |
| | | % within GROUP | 44.4% | 11.6% | 27.7% |
| | 5.00 | Count | 35 | 96 | 131 |
| | | % within GROUP | 32.4% | 85.7% | 59.5% |
| Total | | Count | 108 | 112 | 220 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 65.721[a] | 2 | .000 |
| Likelihood Ratio | 70.569 | 2 | .000 |
| Linear-by-Linear Association | 59.163 | 1 | .000 |
| N of Valid Cases | 220 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.75.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q40 | 1 * GROUP | 222 | 52.9% | 198 | 47.1% | 420 | 100.0% |

**Q40 1 * GROUP Crosstabulation**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| Q40 1 | 1.00 | Count | 19 | 3 | 22 |
| | | % within GROUP | 17.3% | 2.7% | 9.9% |
| | 3.00 | Count | 29 | 2 | 31 |
| | | % within GROUP | 26.4% | 1.8% | 14.0% |
| | 5.00 | Count | 62 | 107 | 169 |
| | | % within GROUP | 56.4% | 95.5% | 76.1% |
| Total | | Count | 110 | 112 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 47.121[a] | 2 | .000 |
| Likelihood Ratio | 53.227 | 2 | .000 |
| Linear-by-Linear Association | 37.853 | 1 | .000 |
| N of Valid Cases | 222 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.90.

## Q51 1 * GROUP

**Crosstab**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q51 1 | 1.00 | Count | 69 | 35 | 104 |
| | | % within GROUP | 63.3% | 31.3% | 47.1% |
| | 5.00 | Count | 40 | 77 | 117 |
| | | % within GROUP | 36.7% | 68.8% | 52.9% |
| Total | | Count | 109 | 112 | 221 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | 22.780[b] | 1 | .000 | | |
| Continuity Correction[a] | 21.511 | 1 | .000 | | |
| Likelihood Ratio | 23.186 | 1 | .000 | | |
| Fisher's Exact Test | | | | .000 | .000 |
| Linear-by-Linear Association | 22.677 | 1 | .000 | | |
| N of Valid Cases | 221 | | | | |

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 51.29.

## Q54 1 * GROUP

**Crosstab**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| Q54 1 | 1.00 | Count | 21 | 4 | 25 |
| | | % within GROUP | 19.4% | 3.6% | 11.4% |
| | 3.00 | Count | 52 | 57 | 109 |
| | | % within GROUP | 48.1% | 50.9% | 49.5% |
| | 5.00 | Count | 35 | 51 | 86 |
| | | % within GROUP | 32.4% | 45.5% | 39.1% |
| Total | | Count | 108 | 112 | 220 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 14.698[a] | 2 | .001 |
| Likelihood Ratio | 15.825 | 2 | .000 |
| Linear-by-Linear Association | 10.764 | 1 | .001 |
| N of Valid Cases | 220 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.27.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q34 | 1 * GROUP | 220 | 52.4% | 200 | 47.6% | 420 | 100.0% |

**Q34 1 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q34 1 | 1.00 | Count | 25 | 9 | 34 |
| | | % within GROUP | 22.9% | 8.1% | 15.5% |
| | 3.00 | Count | 27 | 21 | 48 |
| | | % within GROUP | 24.8% | 18.9% | 21.8% |
| | 5.00 | Count | 57 | 81 | 138 |
| | | % within GROUP | 52.3% | 73.0% | 62.7% |
| Total | | Count | 109 | 111 | 220 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 12.436[a] | 2 | .002 |
| Likelihood Ratio | 12.764 | 2 | .002 |
| Linear-by-Linear Association | 12.362 | 1 | .000 |
| N of Valid Cases | 220 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.85.

# Crosstabs

## Q32 2 * GROUP

**Crosstab**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q32 2 | 1.00 | Count | 39 | 21 | 60 |
| | | % within GROUP | 35.8% | 18.8% | 27.1% |
| | 5.00 | Count | 70 | 91 | 161 |
| | | % within GROUP | 64.2% | 81.3% | 72.9% |
| Total | | Count | 109 | 112 | 221 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | 8.100[b] | 1 | .004 | | |
| Continuity Correction[a] | 7.262 | 1 | .007 | | |
| Likelihood Ratio | 8.190 | 1 | .004 | | |
| Fisher's Exact Test | | | | .006 | .003 |
| Linear-by-Linear Association | 8.063 | 1 | .005 | | |
| N of Valid Cases | 221 | | | | |

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 29.59.

## Q46 1 * GROUP

**Crosstab**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| Q46 1 | 1.00 | Count | 8 | 1 | 9 |
| | | % within GROUP | 7.3% | .9% | 4.1% |
| | 5.00 | Count | 101 | 111 | 212 |
| | | % within GROUP | 92.7% | 99.1% | 95.9% |
| Total | | Count | 109 | 112 | 221 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | 5.877[b] | 1 | .015 | | |
| Continuity Correction[a] | 4.342 | 1 | .037 | | |
| Likelihood Ratio | 6.629 | 1 | .010 | | |
| Fisher's Exact Test | | | | .018 | .016 |
| Linear-by-Linear Association | 5.850 | 1 | .016 | | |
| N of Valid Cases | 221 | | | | |

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.44.

## Q35 * GROUP

**Crosstab**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| Q35 | 1.00 | Count | 15 | 4 | 19 |
| | | % within GROUP | 13.8% | 3.6% | 8.6% |
| | 5.00 | Count | 94 | 107 | 201 |
| | | % within GROUP | 86.2% | 96.4% | 91.4% |
| Total | | Count | 109 | 111 | 220 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | 7.192[b] | 1 | .007 | | |
| Continuity Correction[a] | 5.962 | 1 | .015 | | |
| Likelihood Ratio | 7.606 | 1 | .006 | | |
| Fisher's Exact Test | | | | .008 | .006 |
| Linear-by-Linear Association | 7.159 | 1 | .007 | | |
| N of Valid Cases | 220 | | | | |

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.41.

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q49 * GROUP | 216 | 51.4% | 204 | 48.6% | 420 | 100.0% |

**Q49 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q49 | 1.00 | Count | 12 | 3 | 15 |
| | | % within GROUP | 11.3% | 2.7% | 6.9% |
| | 5.00 | Count | 94 | 107 | 201 |
| | | % within GROUP | 88.7% | 97.3% | 93.1% |
| Total | | Count | 106 | 110 | 216 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | 6.169[b] | 1 | .013 | | |
| Continuity Correction[a] | 4.911 | 1 | .027 | | |
| Likelihood Ratio | 6.550 | 1 | .010 | | |
| Fisher's Exact Test | | | | .016 | .012 |
| Linear-by-Linear Association | 6.140 | 1 | .013 | | |
| N of Valid Cases | 216 | | | | |

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.36.

Appendix T

Crosstabs and Chi Squares on Literature Variables for Outlyr A

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q32 | 2 * OUTLYRA | 109 | 26.0% | 311 | 74.0% | 420 | 100.0% |

**Q32 2 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q32 2 | 1.00 | Count | 25 | 14 | 39 |
| | | % within OUTLYRA | 35.2% | 36.8% | 35.8% |
| | 5.00 | Count | 46 | 24 | 70 |
| | | % within OUTLYRA | 64.8% | 63.2% | 64.2% |
| Total | | Count | 71 | 38 | 109 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | .029[b] | 1 | .866 | | |
| Continuity Correction[a] | .000 | 1 | 1.000 | | |
| Likelihood Ratio | .029 | 1 | .866 | | |
| Fisher's Exact Test | | | | 1.000 | .514 |
| Linear-by-Linear Association | .028 | 1 | .866 | | |
| N of Valid Cases | 109 | | | | |

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.60.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q34 | 1 * OUTLYRA | 109 | 26.0% | 311 | 74.0% | 420 | 100.0% |

**Q34 1 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q34 1 | 1.00 | Count | 15 | 10 | 25 |
| | | % within OUTLYRA | 21.1% | 26.3% | 22.9% |
| | 3.00 | Count | 16 | 11 | 27 |
| | | % within OUTLYRA | 22.5% | 28.9% | 24.8% |
| | 5.00 | Count | 40 | 17 | 57 |
| | | % within OUTLYRA | 56.3% | 44.7% | 52.3% |
| Total | | Count | 71 | 38 | 109 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 1.338[a] | 2 | .512 |
| Likelihood Ratio | 1.339 | 2 | .512 |
| Linear-by-Linear Association | 1.038 | 1 | .308 |
| N of Valid Cases | 109 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.72.

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q35 * OUTLYRA | 109 | 26.0% | 311 | 74.0% | 420 | 100.0% |

**Q35 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q35 | 1.00 | Count | 10 | 5 | 15 |
| | | % within OUTLYRA | 14.1% | 13.2% | 13.8% |
| | 5.00 | Count | 61 | 33 | 94 |
| | | % within OUTLYRA | 85.9% | 86.8% | 86.2% |
| Total | | Count | 71 | 38 | 109 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | .018[b] | 1 | .894 | | |
| Continuity Correction[a] | .000 | 1 | 1.000 | | |
| Likelihood Ratio | .018 | 1 | .893 | | |
| Fisher's Exact Test | | | | 1.000 | .571 |
| Linear-by-Linear Association | .018 | 1 | .894 | | |
| N of Valid Cases | 109 | | | | |

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.23.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q40 1 | * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |

**Q40 1 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | Total |
| Q40 1 | 1.00 | Count | 12 | 7 | 19 |
| | | % within OUTLYRA | 16.9% | 17.9% | 17.3% |
| | 3.00 | Count | 24 | 5 | 29 |
| | | % within OUTLYRA | 33.8% | 12.8% | 26.4% |
| | 5.00 | Count | 35 | 27 | 62 |
| | | % within OUTLYRA | 49.3% | 69.2% | 56.4% |
| Total | | Count | 71 | 39 | 110 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 5.995[a] | 2 | .050 |
| Likelihood Ratio | 6.462 | 2 | .040 |
| Linear-by-Linear Association | 1.525 | 1 | .217 |
| N of Valid Cases | 110 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.74.

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q46 1 * OUTLYRA | 109 | 26.0% | 311 | 74.0% | 420 | 100.0% |

**Q46 1 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q46 1 | 1.00 | Count | 2 | 6 | 8 |
| | | % within OUTLYRA | 2.8% | 15.8% | 7.3% |
| | 5.00 | Count | 69 | 32 | 101 |
| | | % within OUTLYRA | 97.2% | 84.2% | 92.7% |
| Total | | Count | 71 | 38 | 109 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | 6.125[b] | 1 | .013 | | |
| Continuity Correction[a] | 4.366 | 1 | .037 | | |
| Likelihood Ratio | 5.819 | 1 | .016 | | |
| Fisher's Exact Test | | | | .021 | .021 |
| Linear-by-Linear Association | 6.069 | 1 | .014 | | |
| N of Valid Cases | 109 | | | | |

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.79.

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q49 * OUTLYRA | 106 | 25.2% | 314 | 74.8% | 420 | 100.0% |

**Q49 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q49 | 1.00 | Count | 7 | 5 | 12 |
| | | % within OUTLYRA | 10.0% | 13.9% | 11.3% |
| | 5.00 | Count | 63 | 31 | 94 |
| | | % within OUTLYRA | 90.0% | 86.1% | 88.7% |
| Total | | Count | 70 | 36 | 106 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | .358[b] | 1 | .550 | | |
| Continuity Correction[a] | .076 | 1 | .783 | | |
| Likelihood Ratio | .349 | 1 | .555 | | |
| Fisher's Exact Test | | | | .536 | .383 |
| Linear-by-Linear Association | .355 | 1 | .551 | | |
| N of Valid Cases | 106 | | | | |

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.08.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q51 | 1 * OUTLYRA | 109 | 26.0% | 311 | 74.0% | 420 | 100.0% |

**Q51 1 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q51 1 | 1.00 | Count | 44 | 25 | 69 |
| | | % within OUTLYRA | 62.0% | 65.8% | 63.3% |
| | 5.00 | Count | 27 | 13 | 40 |
| | | % within OUTLYRA | 38.0% | 34.2% | 36.7% |
| Total | | Count | 71 | 38 | 109 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | .155[b] | 1 | .694 | | |
| Continuity Correction[a] | .034 | 1 | .853 | | |
| Likelihood Ratio | .156 | 1 | .693 | | |
| Fisher's Exact Test | | | | .835 | .429 |
| Linear-by-Linear Association | .154 | 1 | .695 | | |
| N of Valid Cases | 109 | | | | |

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.94.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q52 | 5 * OUTLYRA | 108 | 25.7% | 312 | 74.3% | 420 | 100.0% |

**Q52 5 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q52 5 | 1.00 | Count | 13 | 12 | 25 |
| | | % within OUTLYRA | 18.6% | 31.6% | 23.1% |
| | 3.00 | Count | 36 | 12 | 48 |
| | | % within OUTLYRA | 51.4% | 31.6% | 44.4% |
| | 5.00 | Count | 21 | 14 | 35 |
| | | % within OUTLYRA | 30.0% | 36.8% | 32.4% |
| Total | | Count | 70 | 38 | 108 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 4.339[a] | 2 | .114 |
| Likelihood Ratio | 4.382 | 2 | .112 |
| Linear-by-Linear Association | .170 | 1 | .680 |
| N of Valid Cases | 108 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.80.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q54 | 1 * OUTLYRA | 108 | 25.7% | 312 | 74.3% | 420 | 100.0% |

**Q54 1 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q54 1 | 1.00 | Count | 9 | 12 | 21 |
| | | % within OUTLYRA | 12.9% | 31.6% | 19.4% |
| | 3.00 | Count | 33 | 19 | 52 |
| | | % within OUTLYRA | 47.1% | 50.0% | 48.1% |
| | 5.00 | Count | 28 | 7 | 35 |
| | | % within OUTLYRA | 40.0% | 18.4% | 32.4% |
| Total | | Count | 70 | 38 | 108 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 8.020[a] | 2 | .018 |
| Likelihood Ratio | 8.113 | 2 | .017 |
| Linear-by-Linear Association | 7.899 | 1 | .005 |
| N of Valid Cases | 108 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.39.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q57 1 | * OUTLYRA | 109 | 26.0% | 311 | 74.0% | 420 | 100.0% |

**Q57 1 * OUTLYRA Crosstabulation**

| | | | OUTLYRA | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q57 1 | 1.00 | Count | 27 | 18 | 45 |
| | | % within OUTLYRA | 38.0% | 47.4% | 41.3% |
| | 3.00 | Count | 31 | 16 | 47 |
| | | % within OUTLYRA | 43.7% | 42.1% | 43.1% |
| | 5.00 | Count | 13 | 4 | 17 |
| | | % within OUTLYRA | 18.3% | 10.5% | 15.6% |
| Total | | Count | 71 | 38 | 109 |
| | | % within OUTLYRA | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 1.498[a] | 2 | .473 |
| Likelihood Ratio | 1.552 | 2 | .460 |
| Linear-by-Linear Association | 1.430 | 1 | .232 |
| N of Valid Cases | 109 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.93.

Appendix U

Crosstabs and Chi Squares on Literature Variables for Outlyr B

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q32 2 * OUTLYRB | 112 | 26.7% | 308 | 73.3% | 420 | 100.0% |

**Q32 2 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q32 2 | 1.00 | Count | 7 | 14 | 21 |
| | | % within OUTLYRB | 46.7% | 14.4% | 18.8% |
| | 5.00 | Count | 8 | 83 | 91 |
| | | % within OUTLYRB | 53.3% | 85.6% | 81.3% |
| Total | | Count | 15 | 97 | 112 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | 8.860[b] | 1 | .003 | | |
| Continuity Correction[a] | 6.871 | 1 | .009 | | |
| Likelihood Ratio | 7.297 | 1 | .007 | | |
| Fisher's Exact Test | | | | .007 | .007 |
| Linear-by-Linear Association | 8.781 | 1 | .003 | | |
| N of Valid Cases | 112 | | | | |

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.81.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q34 1 | * OUTLYRB | 111 | 26.4% | 309 | 73.6% | 420 | 100.0% |

**Q34 1 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q34 1 | 1.00 | Count | 4 | 5 | 9 |
| | | % within OUTLYRB | 26.7% | 5.2% | 8.1% |
| | 3.00 | Count | | 21 | 21 |
| | | % within OUTLYRB | | 21.9% | 18.9% |
| | 5.00 | Count | 11 | 70 | 81 |
| | | % within OUTLYRB | 73.3% | 72.9% | 73.0% |
| Total | | Count | 15 | 96 | 111 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 10.649[a] | 2 | .005 |
| Likelihood Ratio | 11.196 | 2 | .004 |
| Linear-by-Linear Association | 1.459 | 1 | .227 |
| N of Valid Cases | 111 | | |

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.22.

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q35 * OUTLYRB | 111 | 26.4% | 309 | 73.6% | 420 | 100.0% |

**Q35 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q35 | 1.00 | Count | 1 | 3 | 4 |
| | | % within OUTLYRB | 6.7% | 3.1% | 3.6% |
| | 5.00 | Count | 14 | 93 | 107 |
| | | % within OUTLYRB | 93.3% | 96.9% | 96.4% |
| Total | | Count | 15 | 96 | 111 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | .468[b] | 1 | .494 | | |
| Continuity Correction[a] | .000 | 1 | 1.000 | | |
| Likelihood Ratio | .392 | 1 | .531 | | |
| Fisher's Exact Test | | | | .445 | .445 |
| Linear-by-Linear Association | .464 | 1 | .496 | | |
| N of Valid Cases | 111 | | | | |

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .54.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q40 1 | * OUTLYRB | 112 | 26.7% | 308 | 73.3% | 420 | 100.0% |

**Q40 1 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q40 1 | 1.00 | Count | 2 | 1 | 3 |
| | | % within OUTLYRB | 13.3% | 1.0% | 2.7% |
| | 3.00 | Count | 1 | 1 | 2 |
| | | % within OUTLYRB | 6.7% | 1.0% | 1.8% |
| | 5.00 | Count | 12 | 95 | 107 |
| | | % within OUTLYRB | 80.0% | 97.9% | 95.5% |
| Total | | Count | 15 | 97 | 112 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 10.089[a] | 2 | .006 |
| Likelihood Ratio | 6.506 | 2 | .039 |
| Linear-by-Linear Association | 9.820 | 1 | .002 |
| N of Valid Cases | 112 | | |

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .27.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q46 1 | * OUTLYRB | 112 | 26.7% | 308 | 73.3% | 420 | 100.0% |

**Q46 1 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q46 1 | 1.00 | Count | | 1 | 1 |
| | | % within OUTLYRB | | 1.0% | .9% |
| | 5.00 | Count | 15 | 96 | 111 |
| | | % within OUTLYRB | 100.0% | 99.0% | 99.1% |
| Total | | Count | 15 | 97 | 112 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | .156[b] | 1 | .693 | | |
| Continuity Correction[a] | .000 | 1 | 1.000 | | |
| Likelihood Ratio | .289 | 1 | .591 | | |
| Fisher's Exact Test | | | | 1.000 | .866 |
| Linear-by-Linear Association | .155 | 1 | .694 | | |
| N of Valid Cases | 112 | | | | |

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .13.

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q49 * OUTLYRB | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |

**Q49 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q49 | 1.00 | Count | 2 | 1 | 3 |
| | | % within OUTLYRB | 13.3% | 1.1% | 2.7% |
| | 5.00 | Count | 13 | 94 | 107 |
| | | % within OUTLYRB | 86.7% | 98.9% | 97.3% |
| Total | | Count | 15 | 95 | 110 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | 7.365[b] | 1 | .007 | | |
| Continuity Correction[a] | 3.463 | 1 | .063 | | |
| Likelihood Ratio | 4.651 | 1 | .031 | | |
| Fisher's Exact Test | | | | .048 | .048 |
| Linear-by-Linear Association | 7.298 | 1 | .007 | | |
| N of Valid Cases | 110 | | | | |

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .41.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q51 | 1 * OUTLYRB | 112 | 26.7% | 308 | 73.3% | 420 | 100.0% |

**Q51 1 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q51 1 | 1.00 | Count | 6 | 29 | 35 |
| | | % within OUTLYRB | 40.0% | 29.9% | 31.3% |
| | 5.00 | Count | 9 | 68 | 77 |
| | | % within OUTLYRB | 60.0% | 70.1% | 68.8% |
| Total | | Count | 15 | 97 | 112 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-Square | .617[b] | 1 | .432 | | |
| Continuity Correction[a] | .237 | 1 | .627 | | |
| Likelihood Ratio | .595 | 1 | .440 | | |
| Fisher's Exact Test | | | | .550 | .306 |
| Linear-by-Linear Association | .612 | 1 | .434 | | |
| N of Valid Cases | 112 | | | | |

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.69.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q52 | 5 * OUTLYRB | 112 | 26.7% | 308 | 73.3% | 420 | 100.0% |

**Q52 5 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Q52 5 | 1.00 | Count | 2 | 1 | 3 |
| | | % within OUTLYRB | 13.3% | 1.0% | 2.7% |
| | 3.00 | Count | 3 | 10 | 13 |
| | | % within OUTLYRB | 20.0% | 10.3% | 11.6% |
| | 5.00 | Count | 10 | 86 | 96 |
| | | % within OUTLYRB | 66.7% | 88.7% | 85.7% |
| Total | | Count | 15 | 97 | 112 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 9.125[a] | 2 | .010 |
| Likelihood Ratio | 6.189 | 2 | .045 |
| Linear-by-Linear Association | 7.788 | 1 | .005 |
| N of Valid Cases | 112 | | |

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .40.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q54 | 1 * OUTLYRB | 112 | 26.7% | 308 | 73.3% | 420 | 100.0% |

**Q54 1 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | Total |
| Q54 1 | 1.00 | Count | 1 | 3 | 4 |
| | | % within OUTLYRB | 6.7% | 3.1% | 3.6% |
| | 3.00 | Count | 9 | 48 | 57 |
| | | % within OUTLYRB | 60.0% | 49.5% | 50.9% |
| | 5.00 | Count | 5 | 46 | 51 |
| | | % within OUTLYRB | 33.3% | 47.4% | 45.5% |
| Total | | Count | 15 | 97 | 112 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 1.313[a] | 2 | .519 |
| Likelihood Ratio | 1.270 | 2 | .530 |
| Linear-by-Linear Association | 1.275 | 1 | .259 |
| N of Valid Cases | 112 | | |

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .54.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q57 | 1 * OUTLYRB | 113 | 26.9% | 307 | 73.1% | 420 | 100.0% |

**Q57 1 * OUTLYRB Crosstabulation**

| | | | OUTLYRB | | |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | Total |
| Q57 1 | 1.00 | Count | 2 | 1 | 3 |
| | | % within OUTLYRB | 12.5% | 1.0% | 2.7% |
| | 3.00 | Count | 4 | 13 | 17 |
| | | % within OUTLYRB | 25.0% | 13.4% | 15.0% |
| | 5.00 | Count | 10 | 83 | 93 |
| | | % within OUTLYRB | 62.5% | 85.6% | 82.3% |
| Total | | Count | 16 | 97 | 113 |
| | | % within OUTLYRB | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 8.921[a] | 2 | .012 |
| Likelihood Ratio | 6.319 | 2 | .042 |
| Linear-by-Linear Association | 7.545 | 1 | .006 |
| N of Valid Cases | 113 | | |

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .42.

# Appendix V

## Correlations, Crosstabs, and Chi Squares on Student Opinion Inventory Items

## Correlations

**Correlations**

| | | | SCORE | SAT | COM | TCH | Q43 5 | Q44 1 |
|---|---|---|---|---|---|---|---|---|
| SCORE | | Pearson Correlation | 1.000 | .811** | .931** | .873** | .250** | -.349** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 418 | 418 |
| SAT | | Pearson Correlation | .811** | 1.000 | .718** | .552** | .338** | -.384** |
| | | Sig. (2-tailed) | .000 | . | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 418 | 418 |
| COM | | Pearson Correlation | .931** | .718** | 1.000 | .683** | .231** | -.308** |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 418 | 418 |
| TCH | | Pearson Correlation | .873** | .552** | .683** | 1.000 | .141** | -.267** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . | .004 | .000 |
| | | N | 420 | 420 | 420 | 420 | 418 | 418 |
| Q43 | 5 | Pearson Correlation | .250** | .338** | .231** | .141** | 1.000 | -.520** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .004 | . | .000 |
| | | N | 418 | 418 | 418 | 418 | 418 | 417 |
| Q44 | 1 | Pearson Correlation | -.349** | -.384** | -.308** | -.267** | -.520** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | | N | 418 | 418 | 418 | 418 | 417 | 418 |
| Q45 | 5 | Pearson Correlation | .287** | .214** | .272** | .256** | .132** | -.144** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .007 | .003 |
| | | N | 419 | 419 | 419 | 419 | 418 | 418 |
| Q48 | 1 | Pearson Correlation | -.391** | -.321** | -.385** | -.316** | -.171** | .170** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 418 | 418 | 418 | 418 | 418 | 417 |
| Q57 | 1 | Pearson Correlation | .566** | .406** | .480** | .578** | .120* | -.237** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .014 | .000 |
| | | N | 419 | 419 | 419 | 419 | 418 | 418 |
| Q59 | 1 | Pearson Correlation | .575** | .401** | .539** | .535** | .185** | -.304** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 419 | 419 | 419 | 419 | 418 | 418 |
| Q61 | 1 | Pearson Correlation | -.207** | -.161** | -.170** | -.212** | -.047 | .129** |
| | | Sig. (2-tailed) | .000 | .001 | .000 | .000 | .335 | .008 |
| | | N | 418 | 418 | 418 | 418 | 417 | 417 |
| Q62 | 1 | Pearson Correlation | -.437** | -.372** | -.374** | -.408** | -.162** | .365** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .001 | .000 |
| | | N | 418 | 418 | 418 | 418 | 417 | 417 |

**Correlations**

| | | | Q45 5 | Q48 1 | Q57 1 | Q59 1 | Q61 1 | Q62 1 |
|---|---|---|---|---|---|---|---|---|
| SCORE | | Pearson Correlation | .287** | -.391** | .566** | .575** | -.207** | -.437** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 419 | 418 | 419 | 419 | 418 | 418 |
| SAT | | Pearson Correlation | .214** | -.321** | .406** | .401** | -.161** | -.372** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .001 | .000 |
| | | N | 419 | 418 | 419 | 419 | 418 | 418 |
| COM | | Pearson Correlation | .272** | -.385** | .480** | .539** | -.170** | -.374** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 419 | 418 | 419 | 419 | 418 | 418 |
| TCH | | Pearson Correlation | .256** | -.316** | .578** | .535** | -.212** | -.408** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 419 | 418 | 419 | 419 | 418 | 418 |
| Q43 | 5 | Pearson Correlation | .132** | -.171** | .120* | .185** | -.047 | -.162** |
| | | Sig. (2-tailed) | .007 | .000 | .014 | .000 | .335 | .001 |
| | | N | 418 | 418 | 418 | 418 | 417 | 417 |
| Q44 | 1 | Pearson Correlation | -.144** | .170** | -.237** | -.304** | .129** | .365** |
| | | Sig. (2-tailed) | .003 | .000 | .000 | .000 | .008 | .000 |
| | | N | 418 | 417 | 418 | 418 | 417 | 417 |
| Q45 | 5 | Pearson Correlation | 1.000 | -.124* | .267** | .221** | -.168** | -.201** |
| | | Sig. (2-tailed) | . | .011 | .000 | .000 | .001 | .000 |
| | | N | 419 | 418 | 419 | 419 | 418 | 418 |
| Q48 | 1 | Pearson Correlation | -.124* | 1.000 | -.293** | -.418** | .090 | .240** |
| | | Sig. (2-tailed) | .011 | . | .000 | .000 | .067 | .000 |
| | | N | 418 | 418 | 418 | 418 | 417 | 417 |
| Q57 | 1 | Pearson Correlation | .267** | -.293** | 1.000 | .550** | -.122* | -.332** |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 | .013 | .000 |
| | | N | 419 | 418 | 419 | 419 | 418 | 418 |
| Q59 | 1 | Pearson Correlation | .221** | -.418** | .550** | 1.000 | -.163** | -.368** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . | .001 | .000 |
| | | N | 419 | 418 | 419 | 419 | 418 | 418 |
| Q61 | 1 | Pearson Correlation | -.168** | .090 | -.122* | -.163** | 1.000 | .388** |
| | | Sig. (2-tailed) | .001 | .067 | .013 | .001 | . | .000 |
| | | N | 418 | 417 | 418 | 418 | 418 | 418 |
| Q62 | 1 | Pearson Correlation | -.201** | .240** | -.332** | -.368** | .388** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | | N | 418 | 417 | 418 | 418 | 418 | 418 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q43 5 * GROUP | 221 | 52.6% | 199 | 47.4% | 420 | 100.0% |

**Q43 5 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q43 5 | 1.00 | Count | 14 | 5 | 19 |
| | | % within GROUP | 12.8% | 4.5% | 8.6% |
| | 2.00 | Count | 28 | 12 | 40 |
| | | % within GROUP | 25.7% | 10.7% | 18.1% |
| | 3.00 | Count | 43 | 42 | 85 |
| | | % within GROUP | 39.4% | 37.5% | 38.5% |
| | 4.00 | Count | 18 | 41 | 59 |
| | | % within GROUP | 16.5% | 36.6% | 26.7% |
| | 5.00 | Count | 6 | 12 | 18 |
| | | % within GROUP | 5.5% | 10.7% | 8.1% |
| Total | | Count | 109 | 112 | 221 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 21.604[a] | 4 | .000 |
| Likelihood Ratio | 22.240 | 4 | .000 |
| Linear-by-Linear Association | 19.165 | 1 | .000 |
| N of Valid Cases | 221 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.88.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q44 1 | * GROUP | 222 | 52.9% | 198 | 47.1% | 420 | 100.0% |

**Q44 1 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q44 1 | 1.00 | Count | 5 | 34 | 39 |
| | | % within GROUP | 4.6% | 30.1% | 17.6% |
| | 2.00 | Count | 32 | 51 | 83 |
| | | % within GROUP | 29.4% | 45.1% | 37.4% |
| | 3.00 | Count | 50 | 19 | 69 |
| | | % within GROUP | 45.9% | 16.8% | 31.1% |
| | 4.00 | Count | 12 | 6 | 18 |
| | | % within GROUP | 11.0% | 5.3% | 8.1% |
| | 5.00 | Count | 10 | 3 | 13 |
| | | % within GROUP | 9.2% | 2.7% | 5.9% |
| Total | | Count | 109 | 113 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 45.553[a] | 4 | .000 |
| Likelihood Ratio | 48.965 | 4 | .000 |
| Linear-by-Linear Association | 36.253 | 1 | .000 |
| N of Valid Cases | 222 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.38.

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q45 5 * GROUP | 222 | 52.9% | 198 | 47.1% | 420 | 100.0% |

**Q45 5 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q45 5 | 1.00 | Count | 19 | 8 | 27 |
| | | % within GROUP | 17.4% | 7.1% | 12.2% |
| | 2.00 | Count | 35 | 14 | 49 |
| | | % within GROUP | 32.1% | 12.4% | 22.1% |
| | 3.00 | Count | 36 | 40 | 76 |
| | | % within GROUP | 33.0% | 35.4% | 34.2% |
| | 4.00 | Count | 16 | 40 | 56 |
| | | % within GROUP | 14.7% | 35.4% | 25.2% |
| | 5.00 | Count | 3 | 11 | 14 |
| | | % within GROUP | 2.8% | 9.7% | 6.3% |
| Total | | Count | 109 | 113 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 28.486[a] | 4 | .000 |
| Likelihood Ratio | 29.537 | 4 | .000 |
| Linear-by-Linear Association | 25.870 | 1 | .000 |
| N of Valid Cases | 222 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.87.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q48 | 1 * GROUP | 221 | 52.6% | 199 | 47.4% | 420 | 100.0% |

**Q48 1 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q48 1 | 1.00 | Count | 23 | 63 | 86 |
| | | % within GROUP | 21.1% | 56.3% | 38.9% |
| | 2.00 | Count | 48 | 39 | 87 |
| | | % within GROUP | 44.0% | 34.8% | 39.4% |
| | 3.00 | Count | 20 | 7 | 27 |
| | | % within GROUP | 18.3% | 6.3% | 12.2% |
| | 4.00 | Count | 11 | 2 | 13 |
| | | % within GROUP | 10.1% | 1.8% | 5.9% |
| | 5.00 | Count | 7 | 1 | 8 |
| | | % within GROUP | 6.4% | .9% | 3.6% |
| Total | | Count | 109 | 112 | 221 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 36.492[a] | 4 | .000 |
| Likelihood Ratio | 38.682 | 4 | .000 |
| Linear-by-Linear Association | 33.237 | 1 | .000 |
| N of Valid Cases | 221 | | |

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 3.95.

## Q57 1 * GROUP

**Crosstab**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q57 1 | 1.00 | Count | 3 | | 3 |
| | | % within GROUP | 2.8% | | 1.4% |
| | 2.00 | Count | 42 | 3 | 45 |
| | | % within GROUP | 38.5% | 2.7% | 20.3% |
| | 3.00 | Count | 47 | 17 | 64 |
| | | % within GROUP | 43.1% | 15.0% | 28.8% |
| | 4.00 | Count | 16 | 84 | 100 |
| | | % within GROUP | 14.7% | 74.3% | 45.0% |
| | 5.00 | Count | 1 | 9 | 10 |
| | | % within GROUP | .9% | 8.0% | 4.5% |
| Total | | Count | 109 | 113 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 103.464[a] | 4 | .000 |
| Likelihood Ratio | 117.112 | 4 | .000 |
| Linear-by-Linear Association | 92.584 | 1 | .000 |
| N of Valid Cases | 222 | | |

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.47.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q59 | 1 * GROUP | 222 | 52.9% | 198 | 47.1% | 420 | 100.0% |

**Q59 1 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q59 1 | 1.00 | Count | 4 | | 4 |
| | | % within GROUP | 3.7% | | 1.8% |
| | 2.00 | Count | 42 | 3 | 45 |
| | | % within GROUP | 38.5% | 2.7% | 20.3% |
| | 3.00 | Count | 30 | 16 | 55 |
| | | % within GROUP | 35.8% | 14.2% | 24.8% |
| | 4.00 | Count | 22 | 60 | 82 |
| | | % within GROUP | 20.2% | 53.1% | 36.9% |
| | 5.00 | Count | 2 | 34 | 36 |
| | | % within GROUP | 1.8% | 30.1% | 16.2% |
| Total | | Count | 109 | 113 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 93.431[a] | 4 | .000 |
| Likelihood Ratio | 108.493 | 4 | .000 |
| Linear-by-Linear Association | 89.490 | 1 | .000 |
| N of Valid Cases | 222 | | |

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.96.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q61 | 1 * GROUP | 222 | 52.9% | 198 | 47.1% | 420 | 100.0% |

**Q61 1 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q61 1 | 1.00 | Count | 27 | 45 | 72 |
| | | % within GROUP | 24.8% | 39.8% | 32.4% |
| | 2.00 | Count | 34 | 37 | 71 |
| | | % within GROUP | 31.2% | 32.7% | 32.0% |
| | 3.00 | Count | 24 | 21 | 45 |
| | | % within GROUP | 22.0% | 18.6% | 20.3% |
| | 4.00 | Count | 12 | 6 | 18 |
| | | % within GROUP | 11.0% | 5.3% | 8.1% |
| | 5.00 | Count | 12 | 4 | 16 |
| | | % within GROUP | 11.0% | 3.5% | 7.2% |
| Total | | Count | 109 | 113 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 10.758[a] | 4 | .029 |
| Likelihood Ratio | 11.028 | 4 | .026 |
| Linear-by-Linear Association | 10.532 | 1 | .001 |
| N of Valid Cases | 222 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.86.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q62 1 | * GROUP | 222 | 52.9% | 198 | 47.1% | 420 | 100.0% |

**Q62 1 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q62 1 | 1.00 | Count | 4 | 23 | 27 |
| | | % within GROUP | 3.7% | 20.4% | 12.2% |
| | 2.00 | Count | 26 | 54 | 80 |
| | | % within GROUP | 23.9% | 47.8% | 36.0% |
| | 3.00 | Count | 45 | 29 | 74 |
| | | % within GROUP | 41.3% | 25.7% | 33.3% |
| | 4.00 | Count | 22 | 5 | 27 |
| | | % within GROUP | 20.2% | 4.4% | 12.2% |
| | 5.00 | Count | 12 | 2 | 14 |
| | | % within GROUP | 11.0% | 1.8% | 6.3% |
| Total | | Count | 109 | 113 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 44.419[a] | 4 | .000 |
| Likelihood Ratio | 47.683 | 4 | .000 |
| Linear-by-Linear Association | 42.302 | 1 | .000 |
| N of Valid Cases | 222 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.87.

Appendix W

Correlations, Crosstabs, and Chi Squares on Steinberg Items

## Correlations

**Correlations**

| | | | SCORE | SAT | COM | TCH | Q41 5 | Q54 1 |
|---|---|---|---|---|---|---|---|---|
| SCORE | | Pearson Correlation | 1.000 | .811** | .931** | .873** | .388** | .221** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 418 | 415 |
| SAT | | Pearson Correlation | .811** | 1.000 | .718** | .552** | .308** | .185** |
| | | Sig. (2-tailed) | .000 | . | .000 | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 418 | 415 |
| COM | | Pearson Correlation | .931** | .718** | 1.000 | .683** | .402** | .205** |
| | | Sig. (2-tailed) | .000 | .000 | . | .000 | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 418 | 415 |
| TCH | | Pearson Correlation | .873** | .552** | .683** | 1.000 | .297** | .192** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . | .000 | .000 |
| | | N | 420 | 420 | 420 | 420 | 418 | 415 |
| Q41 | 5 | Pearson Correlation | .388** | .308** | .402** | .297** | 1.000 | .329** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . | .000 |
| | | N | 418 | 418 | 418 | 418 | 418 | 414 |
| Q54 | 1 | Pearson Correlation | .221** | .185** | .205** | .192** | .329** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | | N | 415 | 415 | 415 | 415 | 414 | 415 |
| Q55 | 5 | Pearson Correlation | .436** | .325** | .432** | .367** | .587** | .355** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 418 | 418 | 418 | 418 | 417 | 415 |
| Q56 | 1 | Pearson Correlation | -.234** | -.177** | -.220** | -.209** | -.198** | -.093 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .057 |
| | | N | 418 | 418 | 418 | 418 | 417 | 415 |
| Q58 | 5 | Pearson Correlation | .491** | .334** | .401** | .529** | .270** | .187** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 416 | 416 | 416 | 416 | 415 | 413 |
| Q60 | 5 | Pearson Correlation | .568** | .424** | .554** | .490** | .427** | .292** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | | N | 418 | 418 | 418 | 418 | 416 | 414 |

**Correlations**

| | | | Q55 5 | Q56 1 | Q58 5 | Q60 5 |
|---|---|---|---|---|---|---|
| SCORE | | Pearson Correlation | .436** | -.234** | .491** | .568** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | | N | 418 | 418 | 416 | 418 |
| SAT | | Pearson Correlation | .325** | -.177** | .334** | .424** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | | N | 418 | 418 | 416 | 418 |
| COM | | Pearson Correlation | .432** | -.220** | .401** | .554** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | | N | 418 | 418 | 416 | 418 |
| TCH | | Pearson Correlation | .367** | -.209** | .529** | .490** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | | N | 418 | 418 | 416 | 418 |
| Q41 | 5 | Pearson Correlation | .587** | -.198** | .270** | .427** |
| | | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | | N | 417 | 417 | 415 | 416 |
| Q54 | 1 | Pearson Correlation | .355** | -.093 | .187** | .292** |
| | | Sig. (2-tailed) | .000 | .057 | .000 | .000 |
| | | N | 415 | 415 | 413 | 414 |
| Q55 | 5 | Pearson Correlation | 1.000 | -.219** | .252** | .512** |
| | | Sig. (2-tailed) | . | .000 | .000 | .000 |
| | | N | 418 | 418 | 416 | 417 |
| Q56 | 1 | Pearson Correlation | -.219** | 1.000 | -.144** | -.247** |
| | | Sig. (2-tailed) | .000 | . | .003 | .000 |
| | | N | 418 | 418 | 416 | 417 |
| Q58 | 5 | Pearson Correlation | .252** | -.144** | 1.000 | .468** |
| | | Sig. (2-tailed) | .000 | .003 | . | .000 |
| | | N | 416 | 416 | 416 | 415 |
| Q60 | 5 | Pearson Correlation | .512** | -.247** | .468** | 1.000 |
| | | Sig. (2-tailed) | .000 | .000 | .000 | . |
| | | N | 417 | 417 | 415 | 418 |

**. Correlation is significant at the 0.01 level (2-tailed).

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q41 5 * GROUP | 222 | 52.9% | 198 | 47.1% | 420 | 100.0% |

**Q41 5 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q41 5 | 1.00 | Count | 5 | 1 | 6 |
| | | % within GROUP | 4.5% | .9% | 2.7% |
| | 2.00 | Count | 20 | 3 | 23 |
| | | % within GROUP | 18.2% | 2.7% | 10.4% |
| | 3.00 | Count | 47 | 27 | 74 |
| | | % within GROUP | 42.7% | 24.1% | 33.3% |
| | 4.00 | Count | 26 | 40 | 66 |
| | | % within GROUP | 23.6% | 35.7% | 29.7% |
| | 5.00 | Count | 12 | 41 | 53 |
| | | % within GROUP | 10.9% | 36.6% | 23.9% |
| Total | | Count | 110 | 112 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 39.460[a] | 4 | .000 |
| Likelihood Ratio | 42.205 | 4 | .000 |
| Linear-by-Linear Association | 37.972 | 1 | .000 |
| N of Valid Cases | 222 | | |

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 2.97.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q54 | 1 * GROUP | 220 | 52.4% | 200 | 47.6% | 420 | 100.0% |

**Q54 1 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q54 1 | 1.00 | Count | 21 | 4 | 25 |
| | | % within GROUP | 19.4% | 3.6% | 11.4% |
| | 3.00 | Count | 52 | 57 | 109 |
| | | % within GROUP | 48.1% | 50.9% | 49.5% |
| | 5.00 | Count | 35 | 51 | 86 |
| | | % within GROUP | 32.4% | 45.5% | 39.1% |
| Total | | Count | 108 | 112 | 220 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 14.698[a] | 2 | .001 |
| Likelihood Ratio | 15.825 | 2 | .000 |
| Linear-by-Linear Association | 10.764 | 1 | .001 |
| N of Valid Cases | 220 | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.27.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q55 | 5 * GROUP | 221 | 52.6% | 199 | 47.4% | 420 | 100.0% |

**Q55 5 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q55 5 | 1.00 | Count | 8 | | 8 |
| | | % within GROUP | 7.3% | | 3.6% |
| | 2.00 | Count | 13 | 1 | 14 |
| | | % within GROUP | 11.9% | .9% | 6.3% |
| | 3.00 | Count | 15 | 3 | 18 |
| | | % within GROUP | 13.8% | 2.7% | 8.1% |
| | 4.00 | Count | 46 | 33 | 79 |
| | | % within GROUP | 42.2% | 29.5% | 35.7% |
| | 5.00 | Count | 27 | 75 | 102 |
| | | % within GROUP | 24.8% | 67.0% | 46.2% |
| Total | | Count | 109 | 112 | 221 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 50.982[a] | 4 | .000 |
| Likelihood Ratio | 57.641 | 4 | .000 |
| Linear-by-Linear Association | 47.337 | 1 | .000 |
| N of Valid Cases | 221 | | |

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 3.95.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q56 1 | * GROUP | 221 | 52.6% | 199 | 47.4% | 420 | 100.0% |

**Q56 1 * GROUP Crosstabulation**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| Q56 1 | 1.00 | Count | 13 | 11 | 24 |
| | | % within GROUP | 11.9% | 9.8% | 10.9% |
| | 2.00 | Count | 57 | 93 | 150 |
| | | % within GROUP | 52.3% | 83.0% | 67.9% |
| | 3.00 | Count | 31 | 8 | 39 |
| | | % within GROUP | 28.4% | 7.1% | 17.6% |
| | 4.00 | Count | 7 | | 7 |
| | | % within GROUP | 6.4% | | 3.2% |
| | 5.00 | Count | 1 | | 1 |
| | | % within GROUP | .9% | | .5% |
| Total | | Count | 109 | 112 | 221 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 30.336[a] | 4 | .000 |
| Likelihood Ratio | 34.427 | 4 | .000 |
| Linear-by-Linear Association | 15.422 | 1 | .000 |
| N of Valid Cases | 221 | | |

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .49.

# Crosstabs

**Case Processing Summary**

| | | Cases | | | | | |
|---|---|---|---|---|---|---|---|
| | | Valid | | Missing | | Total | |
| | | N | Percent | N | Percent | N | Percent |
| Q58 | 5 * GROUP | 220 | 52.4% | 200 | 47.6% | 420 | 100.0% |

**Q58 5 * GROUP Crosstabulation**

| | | | GROUP | | |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | Total |
| Q58 5 | 1.00 | Count | 4 | | 4 |
| | | % within GROUP | 3.7% | | 1.8% |
| | 2.00 | Count | 26 | 4 | 30 |
| | | % within GROUP | 23.9% | 3.6% | 13.6% |
| | 3.00 | Count | 27 | 3 | 30 |
| | | % within GROUP | 24.8% | 2.7% | 13.6% |
| | 4.00 | Count | 31 | 43 | 74 |
| | | % within GROUP | 28.4% | 38.7% | 33.6% |
| | 5.00 | Count | 21 | 61 | 82 |
| | | % within GROUP | 19.3% | 55.0% | 37.3% |
| Total | | Count | 109 | 111 | 220 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 60.778[a] | 4 | .000 |
| Likelihood Ratio | 67.965 | 4 | .000 |
| Linear-by-Linear Association | 54.020 | 1 | .000 |
| N of Valid Cases | 220 | | |

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.98.

# Crosstabs

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Valid | | Missing | | Total | |
| | N | Percent | N | Percent | N | Percent |
| Q60 5 * GROUP | 222 | 52.9% | 198 | 47.1% | 420 | 100.0% |

**Q60 5 * GROUP Crosstabulation**

| | | | GROUP | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Q60 5 | 1.00 | Count | 4 | | 4 |
| | | % within GROUP | 3.7% | | 1.8% |
| | 2.00 | Count | 21 | 1 | 22 |
| | | % within GROUP | 19.3% | .9% | 9.9% |
| | 3.00 | Count | 36 | 5 | 41 |
| | | % within GROUP | 33.0% | 4.4% | 18.5% |
| | 4.00 | Count | 44 | 58 | 102 |
| | | % within GROUP | 40.4% | 51.3% | 45.9% |
| | 5.00 | Count | 4 | 49 | 53 |
| | | % within GROUP | 3.7% | 43.4% | 23.9% |
| Total | | Count | 109 | 113 | 222 |
| | | % within GROUP | 100.0% | 100.0% | 100.0% |

**Chi-Square Tests**

| | Value | df | Asymp. Sig. (2-sided) |
|---|---|---|---|
| Pearson Chi-Square | 85.706[a] | 4 | .000 |
| Likelihood Ratio | 101.308 | 4 | .000 |
| Linear-by-Linear Association | 78.929 | 1 | .000 |
| N of Valid Cases | 222 | | |

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.96.

Appendix X

Correlations, Means, T-Tests, and Discriminant Analysis
on Traditional Indicators and QSL Score

## Correlations

**Correlations**

| | | SCORE | SAT | COM | TCH | COMPSCOR | GR1X |
|---|---|---|---|---|---|---|---|
| SCORE | Pearson Correlation | 1.000 | .811** | .931** | .873** | -.290** | -.261** |
| | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 419 | 419 |
| SAT | Pearson Correlation | .811** | 1.000 | .718** | .552** | -.214** | -.196** |
| | Sig. (2-tailed) | .000 | . | .000 | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 419 | 419 |
| COM | Pearson Correlation | .931** | .718** | 1.000 | .683** | -.259** | -.248** |
| | Sig. (2-tailed) | .000 | .000 | . | .000 | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 419 | 419 |
| TCH | Pearson Correlation | .873** | .552** | .683** | 1.000 | -.277** | -.233** |
| | Sig. (2-tailed) | .000 | .000 | .000 | . | .000 | .000 |
| | N | 420 | 420 | 420 | 420 | 419 | 419 |
| COMPSCOR | Pearson Correlation | -.290** | -.214** | -.259** | -.277** | 1.000 | .735** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |
| GR1X | Pearson Correlation | -.261** | -.196** | -.248** | -.233** | .735** | 1.000 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | . |
| | N | 419 | 419 | 419 | 41J | 419 | 419 |
| GR2X | Pearson Correlation | -.263** | -.186** | -.238** | -.254** | .808** | .827** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |
| EFFORTX | Pearson Correlation | -.310** | -.233** | -.273** | -.300** | .779** | .763** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |
| CONDUCTX | Pearson Correlation | -.152** | -.087 | -.129** | -.168** | .586** | .493** |
| | Sig. (2-tailed) | .002 | .076 | .008 | .001 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |
| ABSENCEX | Pearson Correlation | -.162** | -.160** | -.120* | -.160** | .676** | .312** |
| | Sig. (2-tailed) | .001 | .001 | .014 | .001 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |
| LTSCHX | Pearson Correlation | -.196** | -.132** | -.202** | -.164** | .686** | .323** |
| | Sig. (2-tailed) | .000 | .007 | .000 | .001 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |
| LTCLREPX | Pearson Correlation | -.144** | -.086 | -.133** | -.146** | .569** | .359** |
| | Sig. (2-tailed) | .003 | .079 | .006 | .003 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |
| CUTSX | Pearson Correlation | -.171** | -.121* | -.147** | -.173** | .715** | .466** |
| | Sig. (2-tailed) | .000 | .013 | .003 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |
| DETX | Pearson Correlation | -.229** | -.150** | -.205** | -.229** | .787** | .491** |
| | Sig. (2-tailed) | .000 | .002 | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |
| SUSPENX | Pearson Correlation | -.158** | -.103* | -.153** | -.145** | .607** | .382** |
| | Sig. (2-tailed) | .001 | .035 | .002 | .003 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 | 419 |

**Correlations**

| | | GR2X | EFFORTX | CONDUCTX | ABSENCEX | LTSCHX |
|---|---|---|---|---|---|---|
| SCORE | Pearson Correlation | -.263** | -.310** | -.152** | -.162** | -.196** |
| | Sig. (2-tailed) | .000 | .000 | .002 | .001 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| SAT | Pearson Correlation | -.186** | -.233** | -.087 | -.160** | -.132** |
| | Sig. (2-tailed) | .000 | .000 | .076 | .001 | .007 |
| | N | 419 | 419 | 419 | 419 | 419 |
| COM | Pearson Correlation | -.238** | -.273** | -.129** | -.120* | -.202** |
| | Sig. (2-tailed) | .000 | .000 | .008 | .014 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| TCH | Pearson Correlation | -.254** | -.300** | -.168** | -.160** | -.164** |
| | Sig. (2-tailed) | .000 | .000 | .001 | .001 | .001 |
| | N | 419 | 419 | 419 | 419 | 419 |
| COMPSCOR | Pearson Correlation | .808** | .779** | .586** | .676** | .686** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| GR1X | Pearson Correlation | .827** | .763** | .493** | .312** | .323** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| GR2X | Pearson Correlation | 1.000 | .801** | .559** | .348** | .402** |
| | Sig. (2-tailed) | . | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| EFFORTX | Pearson Correlation | .801** | 1.000 | .596** | .317** | .416** |
| | Sig. (2-tailed) | .000 | . | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| CONDUCTX | Pearson Correlation | .559** | .596** | 1.000 | .222** | .331** |
| | Sig. (2-tailed) | .000 | .000 | . | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| ABSENCEX | Pearson Correlation | .348** | .317** | .222** | 1.000 | .434** |
| | Sig. (2-tailed) | .000 | .000 | .000 | . | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| LTSCHX | Pearson Correlation | .402** | .416** | .331** | .434** | 1.000 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | . |
| | N | 419 | 419 | 419 | 419 | 419 |
| LTCLREPX | Pearson Correlation | .414** | .428** | .284** | .263** | .250** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| CUTSX | Pearson Correlation | .541** | .506** | .288** | .382** | .363** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| DETX | Pearson Correlation | .556** | .560** | .591** | .360** | .544** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |
| SUSPENX | Pearson Correlation | .470** | .477** | .387** | .341** | .345** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 | 419 |

**Correlations**

| | | LTCLREPX | CUTSX | DETX | SUSPENX |
|---|---|---|---|---|---|
| SCORE | Pearson Correlation | -.144** | -.171** | -.229** | -.158** |
| | Sig. (2-tailed) | .003 | .000 | .000 | .001 |
| | N | 419 | 419 | 419 | 419 |
| SAT | Pearson Correlation | -.086 | -.121* | -.150** | -.103* |
| | Sig. (2-tailed) | .079 | .013 | .002 | .035 |
| | N | 419 | 419 | 419 | 419 |
| COM | Pearson Correlation | -.133** | -.147** | -.205** | -.153** |
| | Sig. (2-tailed) | .006 | .003 | .000 | .002 |
| | N | 419 | 419 | 419 | 419 |
| TCH | Pearson Correlation | -.146** | -.173** | -.229** | -.145** |
| | Sig. (2-tailed) | .003 | .000 | .000 | .003 |
| | N | 419 | 419 | 419 | 419 |
| COMPSCOR | Pearson Correlation | .569** | .715** | .787** | .607** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 |
| GR1X | Pearson Correlation | .359** | .466** | .491** | .382** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 |
| GR2X | Pearson Correlation | .414** | .541** | .556** | .470** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 |
| EFFORTX | Pearson Correlation | .428** | .506** | .560** | .477** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 |
| CONDUCTX | Pearson Correlation | .284** | .288** | .591** | .387** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 |
| ABSENCEX | Pearson Correlation | .263** | .382** | .360** | .341** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 |
| LTSCHX | Pearson Correlation | .250** | .363** | .544** | .345** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 |
| LTCLREPX | Pearson Correlation | 1.000 | .365** | .540** | .401** |
| | Sig. (2-tailed) | . | .000 | .000 | .000 |
| | N | 419 | 419 | 419 | 419 |
| CUTSX | Pearson Correlation | .365** | 1.000 | .584** | .502** |
| | Sig. (2-tailed) | .000 | . | .000 | .000 |
| | N | 419 | 419 | 419 | 419 |
| DETX | Pearson Correlation | .540** | .584** | 1.000 | .540** |
| | Sig. (2-tailed) | .000 | .000 | . | .000 |
| | N | 419 | 419 | 419 | 419 |
| SUSPENX | Pearson Correlation | .401** | .502** | .540** | 1.000 |
| | Sig. (2-tailed) | .000 | .000 | .000 | . |
| | N | 419 | 419 | 419 | 419 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| SCORE * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| SAT * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| COM * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| TCH * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| COMPSCOR * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| GR1X * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| GR2X * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| EFFORTX * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| CONDUCTX * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| ABSENCEX * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| LTSCHX * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| LTCLREPX * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| CUTSX * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| DETX * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| SUSPENX * GROUP | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |

**Report**

| GROUP | | SCORE | SAT | COM | TCH | COMPSCOR | GR1X | GR2X |
|---|---|---|---|---|---|---|---|---|
| 1.00 | Mean | 62.6000 | 10.3818 | 23.5818 | 28.6364 | 27.3000 | 2.3636 | 2.7000 |
| | N | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| | Std. Deviation | 7.5653 | 2.7826 | 4.3333 | 4.4366 | 17.7854 | 2.6011 | 3.0154 |
| 3.00 | Mean | 100.8230 | 18.0796 | 40.5664 | 42.1770 | 19.0442 | 1.3540 | 1.4513 |
| | N | 113 | 113 | 113 | 113 | 113 | 113 | 113 |
| | Std. Deviation | 6.7311 | 2.2918 | 3.7888 | 3.8037 | 9.6255 | .9251 | 1.4267 |
| Total | Mean | 81.9686 | 14.2825 | 32.1883 | 35.4978 | 23.1166 | 1.8520 | 2.0673 |
| | N | 223 | 223 | 223 | 223 | 223 | 223 | 223 |
| | Std. Deviation | 20.4398 | 4.6184 | 9.4283 | 7.9372 | 14.8043 | 2.0024 | 2.4255 |

**Report**

| GROUP | | EFFORTX | CONDUCTX | ABSENCEX | LTSCHX | LTCLREPX | CUTSX |
|---|---|---|---|---|---|---|---|
| 1.00 | Mean | 2.4455 | 1.4000 | 6.5727 | 4.4909 | 1.5364 | 2.1455 |
| | N | 110 | 110 | 110 | 110 | 110 | 110 |
| | Std. Deviation | 1.9185 | .9787 | 4.7747 | 3.5446 | 1.5125 | 3.1443 |
| 3.00 | Mean | 1.4513 | 1.1858 | 5.2655 | 3.[illegible]858 | 1.1416 | 1.3363 |
| | N | 113 | 113 | 113 | 113 | 113 | 113 |
| | Std. Deviation | 1.0436 | .6754 | 3.8196 | 2.4148 | .8543 | 1.2219 |
| Total | Mean | 1.9417 | 1.2915 | 5.9103 | 3.8296 | 1.3363 | 1.7354 |
| | N | 223 | 223 | 223 | 223 | 223 | 223 |
| | Std. Deviation | 1.6139 | .8438 | 4.3569 | 3.0884 | 1.2371 | 2.4025 |

**Report**

| GROUP | | DETX | SUSPENX |
|---|---|---|---|
| 1.00 | Mean | 2.4818 | 1.1636 |
| | N | 110 | 110 |
| | Std. Deviation | 2.7884 | .4794 |
| 3.00 | Mean | 1.6018 | 1.0708 |
| | N | 113 | 113 |
| | Std. Deviation | 1.7089 | .3945 |
| Total | Mean | 2.0359 | 1.1166 |
| | N | 223 | 223 |
| | Std. Deviation | 2.3420 | .4399 |

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| COMPSCOR * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| GR1X * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| GR2X * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| EFFORTX * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| CONDUCTX * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| ABSENCEX * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| LTSCHX * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| LTCLREPX * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| CUTSX * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| DETX * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |
| SUSPENX * SCOUTLYR | 223 | 53.1% | 197 | 46.9% | 420 | 100.0% |

**Report**

| SCOUTLYR | | COMPSCOR | GR1X | GR2X | EFFORTX | CONDUCTX | ABSENCEX |
|---|---|---|---|---|---|---|---|
| 1.00 | Mean | 27.3000 | 2.3636 | 2.7000 | 2.4455 | 1.4000 | 6.5727 |
| | N | 110 | 110 | 110 | 110 | 110 | 110 |
| | Std. Deviation | 17.7854 | 2.6011 | 3.0154 | 1.9185 | .9787 | 4.7747 |
| 3.00 | Mean | 19.0442 | 1.3540 | 1.4513 | 1.4513 | 1.1858 | 5.2655 |
| | N | 113 | 113 | 113 | 113 | 113 | 113 |
| | Std. Deviation | 9.6255 | .9251 | 1.4267 | 1.0436 | .6754 | 3.8196 |
| Total | Mean | 23.1166 | 1.8520 | 2.0673 | 1.9417 | 1.2915 | 5.9103 |
| | N | 223 | 223 | 223 | 223 | 223 | 223 |
| | Std. Deviation | 14.8043 | 2.0024 | 2.4255 | 1.6139 | .8438 | 4.3569 |

**Report**

| SCOUTLYR | | LTSCHX | LTCLREPX | CUTSX | DETX | SUSPENX |
|---|---|---|---|---|---|---|
| 1.00 | Mean | 4.4909 | 1.5364 | 2.1455 | 2.4818 | 1.1636 |
| | N | 110 | 110 | 110 | 110 | 110 |
| | Std. Deviation | 3.5446 | 1.5125 | 3.1443 | 2.7884 | .4794 |
| 3.00 | Mean | 3.1858 | 1.1416 | 1.3363 | 1.6018 | 1.0708 |
| | N | 113 | 113 | 113 | 113 | 113 |
| | Std. Deviation | 2.4148 | .8543 | 1.2219 | 1.7089 | .3945 |
| Total | Mean | 3.8296 | 1.3363 | 1.7354 | 2.0359 | 1.1166 |
| | N | 223 | 223 | 223 | 223 | 223 |
| | Std. Deviation | 3.0884 | 1.2371 | 2.4025 | 2.3420 | .4399 |

**ANOVA Table**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| COMPSCOR * SCOUTLYR | Between | (Combined) | 3799.090 | 1 | 3799.090 |
| | Within Groups | | 44855.879 | 221 | 202.968 |
| | Total | | 48654.969 | 222 | |
| GR1X * SCOUTLYR | Between | (Combined) | 56.821 | 1 | 56.821 |
| | Within Groups | | 833.295 | 221 | 3.771 |
| | Total | | 890.117 | 222 | |
| GR2X * SCOUTLYR | Between | (Combined) | 86.909 | 1 | 86.909 |
| | Within Groups | | 1219.082 | 221 | 5.516 |
| | Total | | 1305.991 | 222 | |
| EFFORTX * SCOUTLYR | Between | (Combined) | 55.087 | 1 | 55.087 |
| | Within Groups | | 523.155 | 221 | 2.367 |
| | Total | | 578.242 | 222 | |
| CONDUCTX * SCOUTLYR | Between | (Combined) | 2.556 | 1 | 2.556 |
| | Within Groups | | 155.497 | 221 | .704 |
| | Total | | 158.054 | 222 | |
| ABSENCEX * SCOUTLYR | Between | (Combined) | 95.253 | 1 | 95.253 |
| | Within Groups | | 4118.954 | 221 | 18.638 |
| | Total | | 4214.206 | 222 | |
| LTSCHX * SCOUTLYR | Between | (Combined) | 94.936 | 1 | 94.936 |
| | Within Groups | | 2022.588 | 221 | 9.152 |
| | Total | | 2117.525 | 222 | |
| LTCLREPX * SCOUTLYR | Between | (Combined) | 8.687 | 1 | 8.687 |
| | Within Groups | | 331.089 | 221 | 1.498 |
| | Total | | 339.776 | 222 | |
| CUTSX * SCOUTLYR | Between | (Combined) | 36.496 | 1 | 36.496 |
| | Within Groups | | 1244.894 | 221 | 5.633 |
| | Total | | 1281.390 | 222 | |
| DETX * SCOUTLYR | Between | (Combined) | 43.170 | 1 | 43.170 |
| | Within Groups | | 1174.543 | 221 | 5.315 |
| | Total | | 1217.713 | 222 | |
| SUSPENX * SCOUTLYR | Between | (Combined) | .480 | 1 | .480 |
| | Within Groups | | 42.488 | 221 | .192 |
| | Total | | 42.969 | 222 | |

**ANOVA Table**

| | | | F | Sig. |
|---|---|---|---|---|
| COMPSCOR * SCOUTLYR | Between Groups | (Combined) | 18.718 | .000 |
| | Within Groups | | | |
| | Total | | | |
| GR1X * SCOUTLYR | Between Groups | (Combined) | 15.070 | .000 |
| | Within Groups | | | |
| | Total | | | |
| GR2X * SCOUTLYR | Between Groups | (Combined) | 15.755 | .000 |
| | Within Groups | | | |
| | Total | | | |
| EFFORTX * SCOUTLYR | Between Groups | (Combined) | 23.271 | .000 |
| | Within Groups | | | |
| | Total | | | |
| CONDUCTX * SCOUTLYR | Between Groups | (Combined) | 3.633 | .058 |
| | Within Groups | | | |
| | Total | | | |
| ABSENCEX * SCOUTLYR | Between Groups | (Combined) | 5.111 | .025 |
| | Within Groups | | | |
| | Total | | | |
| LTSCHX * SCOUTLYR | Between Groups | (Combined) | 10.373 | .001 |
| | Within Groups | | | |
| | Total | | | |
| LTCLREPX * SCOUTLYR | Between Groups | (Combined) | 5.798 | .017 |
| | Within Groups | | | |
| | Total | | | |
| CUTSX * SCOUTLYR | Between Groups | (Combined) | 6.479 | .012 |
| | Within Groups | | | |
| | Total | | | |
| DETX * SCOUTLYR | Between Groups | (Combined) | 8.123 | .005 |
| | Within Groups | | | |
| | Total | | | |
| SUSPENX * SCOUTLYR | Between Groups | (Combined) | 2.499 | .115 |
| | Within Groups | | | |
| | Total | | | |

**Measures of Association**

| | Eta | Eta Squared |
|---|---|---|
| COMPSCOR * SCOUTLYR | .279 | .078 |
| GR1X * SCOUTLYR | .253 | .064 |
| GR2X * SCOUTLYR | .258 | .067 |
| EFFORTX * SCOUTLYR | .309 | .095 |
| CONDUCTX * SCOUTLYR | .127 | .016 |
| ABSENCEX * SCOUTLYR | .150 | .023 |
| LTSCHX * SCOUTLYR | .212 | .045 |
| LTCLREPX * SCOUTLYR | .160 | .026 |
| CUTSX * SCOUTLYR | .169 | .028 |
| DETX * SCOUTLYR | .188 | .035 |
| SUSPENX * SCOUTLYR | .106 | .011 |

# T-Test

**Group Statistics**

| | GROUP | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| SCORE | 1.00 | 110 | 62.6000 | 7.5653 | .7213 |
| | 3.00 | 113 | 100.8230 | 6.7311 | .6332 |
| SAT | 1.00 | 110 | 10.3818 | 2.7826 | .2653 |
| | 3.00 | 113 | 18.0796 | 2.2918 | .2156 |
| COM | 1.00 | 110 | 23.5818 | 4.3333 | .4132 |
| | 3.00 | 113 | 40.5664 | 3.7888 | .3564 |
| TCH | 1.00 | 110 | 28.6364 | 4.4366 | .4230 |
| | 3.00 | 113 | 42.1770 | 3.8037 | .3578 |
| COMPSCOR | 1.00 | 110 | 27.3000 | 17.7854 | 1.6958 |
| | 3.00 | 113 | 19.0442 | 9.6255 | .9055 |
| GR1X | 1.00 | 110 | 2.3636 | 2.6011 | .2480 |
| | 3.00 | 113 | 1.3540 | .9251 | 8.702E-02 |
| GR2X | 1.00 | 110 | 2.7000 | 3.0154 | .2875 |
| | 3.00 | 113 | 1.4513 | 1.4267 | .1342 |
| EFFORTX | 1.00 | 110 | 2.4455 | 1.9185 | .1829 |
| | 3.00 | 113 | 1.4513 | 1.0436 | 9.817E-02 |
| CONDUCTX | 1.00 | 110 | 1.4000 | .9787 | 9.331E-02 |
| | 3.00 | 113 | 1.1858 | .6754 | 6.354E-02 |
| ABSENCEX | 1.00 | 110 | 6.5727 | 4.7747 | .4552 |
| | 3.00 | 113 | 5.2655 | 3.8196 | .3593 |
| LTSCHX | 1.00 | 110 | 4.4909 | 3.5446 | .3380 |
| | 3.00 | 113 | 3.1858 | 2.4148 | .2272 |
| LTCLREPX | 1.00 | 110 | 1.5364 | 1.5125 | .1442 |
| | 3.00 | 113 | 1.1416 | .8543 | 8.036E-02 |
| CUTSX | 1.00 | 110 | 2.1455 | 3.1443 | .2998 |
| | 3.00 | 113 | 1.3363 | 1.2219 | .1149 |
| DETX | 1.00 | 110 | 2.4818 | 2.7884 | .2659 |
| | 3.00 | 113 | 1.6018 | 1.7089 | .1608 |
| SUSPENX | 1.00 | 110 | 1.1636 | .4794 | 4.571E-02 |
| | 3.00 | 113 | 1.0708 | .3945 | 3.711E-02 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | |
|---|---|---|---|
| | | F | Sig. |
| SCORE | Equal variances assumed | 1.418 | .235 |
| | Equal variances not assumed | | |
| SAT | Equal variances assumed | 3.450 | .065 |
| | Equal variances not assumed | | |
| COM | Equal variances assumed | 1.854 | .175 |
| | Equal variances not assumed | | |
| TCH | Equal variances assumed | 1.215 | .271 |
| | Equal variances not assumed | | |
| COMPSCOR | Equal variances assumed | 27.189 | .000 |
| | Equal variances not assumed | | |
| GR1X | Equal variances assumed | 39.071 | .000 |
| | Equal variances not assumed | | |
| GR2X | Equal variances assumed | 32.953 | .000 |
| | Equal variances not assumed | | |
| EFFORTX | Equal variances assumed | 33.754 | .000 |
| | Equal variances not assumed | | |
| CONDUCTX | Equal variances assumed | 12.137 | .001 |
| | Equal variances not assumed | | |
| ABSENCEX | Equal variances assumed | 2.534 | .113 |
| | Equal variances not assumed | | |
| LTSCHX | Equal variances assumed | 17.207 | .000 |
| | Equal variances not assumed | | |
| LTCLREPX | Equal variances assumed | 23.936 | .000 |
| | Equal variances not assumed | | |
| CUTSX | Equal variances assumed | 16.524 | .000 |
| | Equal variances not assumed | | |
| DETX | Equal variances assumed | 13.786 | .000 |
| | Equal variances not assumed | | |
| SUSPENX | Equal variances assumed | 9.118 | .003 |
| | Equal variances not assumed | | |

**Independent Samples Test**

| | | t-test for Equality of Means | | | |
|---|---|---|---|---|---|
| | | t | df | Sig. (2-tailed) | Mean Difference |
| SCORE | Equal variances assumed | -39.886 | 221 | .000 | -38.2230 |
| | Equal variances not assumed | -39.823 | 216.563 | .000 | -38.2230 |
| SAT | Equal variances assumed | -22.576 | 221 | .000 | -7.6978 |
| | Equal variances not assumed | -22.517 | 210.961 | .000 | -7.6978 |
| COM | Equal variances assumed | -31.183 | 221 | .000 | -16.9846 |
| | Equal variances not assumed | -31.127 | 215.466 | .000 | -16.9846 |
| TCH | Equal variances assumed | -24.490 | 221 | .000 | -13.5406 |
| | Equal variances not assumed | -24.439 | 214.109 | .000 | -13.5406 |
| COMPSCOR | Equal variances assumed | 4.326 | 221 | .000 | 8.2558 |
| | Equal variances not assumed | 4.295 | 166.819 | .000 | 8.2558 |
| GR1X | Equal variances assumed | 3.882 | 221 | .000 | 1.0097 |
| | Equal variances not assumed | 3.842 | 135.494 | .000 | 1.0097 |
| GR2X | Equal variances assumed | 3.969 | 221 | .000 | 1.2487 |
| | Equal variances not assumed | 3.935 | 154.541 | .000 | 1.2487 |
| EFFORTX | Equal variances assumed | 4.824 | 221 | .000 | .9941 |
| | Equal variances not assumed | 4.789 | 167.330 | .000 | .9941 |
| CONDUCTX | Equal variances assumed | 1.906 | 221 | .058 | .2142 |
| | Equal variances not assumed | 1.897 | 193.111 | .059 | .2142 |
| ABSENCEX | Equal variances assumed | 2.261 | 221 | .025 | 1.3072 |
| | Equal variances not assumed | 2.254 | 208.399 | .025 | 1.3072 |
| LTSCHX | Equal variances assumed | 3.221 | 221 | .001 | 1.3051 |
| | Equal variances not assumed | 3.205 | 191.666 | .002 | 1.3051 |
| LTCLREPX | Equal variances assumed | 2.408 | 221 | .017 | .3948 |
| | Equal variances not assumed | 2.391 | 171.146 | .018 | .3948 |
| CUTSX | Equal variances assumed | 2.545 | 221 | .012 | .8092 |
| | Equal variances not assumed | 2.520 | 140.448 | .013 | .8092 |
| DETX | Equal variances assumed | 2.850 | 221 | .005 | .8800 |
| | Equal variances not assumed | 2.833 | 179.878 | .005 | .8800 |
| SUSPENX | Equal variances assumed | 1.581 | 221 | .115 | 9.284E-02 |
| | Equal variances not assumed | 1.577 | 210.887 | .116 | 9.284E-02 |

**Independent Samples Test**

| | | t-test for Equality of Means | | |
|---|---|---|---|---|
| | | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | Lower | Upper |
| SCORE | Equal variances assumed | .9583 | -40.1116 | -36.3344 |
| | Equal variances not assumed | .9598 | -40.1148 | -36.3312 |
| SAT | Equal variances assumed | .3410 | -8.3698 | -7.0258 |
| | Equal variances not assumed | .3419 | -8.3717 | -7.0239 |
| COM | Equal variances assumed | .5447 | -18.0580 | -15.9111 |
| | Equal variances not assumed | .5457 | -18.0601 | -15.9090 |
| TCH | Equal variances assumed | .5529 | -14.6303 | -12.4510 |
| | Equal variances not assumed | .5541 | -14.6327 | -12.4485 |
| COMPSCOR | Equal variances assumed | 1.9082 | 4.4951 | 12.0164 |
| | Equal variances not assumed | 1.9224 | 4.4604 | 12.0511 |
| GR1X | Equal variances assumed | .2601 | .4971 | 1.5222 |
| | Equal variances not assumed | .2628 | .4899 | 1.5294 |
| GR2X | Equal variances assumed | .3146 | .6287 | 1.8686 |
| | Equal variances not assumed | .3173 | .6219 | 1.8755 |
| EFFORTX | Equal variances assumed | .2061 | .5880 | 1.4003 |
| | Equal variances not assumed | .2076 | .5843 | 1.4040 |
| CONDUCTX | Equal variances assumed | .1124 | -7.26E-03 | .4356 |
| | Equal variances not assumed | .1129 | -8.50E-03 | .4368 |
| ABSENCEX | Equal variances assumed | .5782 | .1677 | 2.4468 |
| | Equal variances not assumed | .5800 | .1639 | 2.4506 |
| LTSCHX | Equal variances assumed | .4052 | .5065 | 2.1036 |
| | Equal variances not assumed | .4072 | .5019 | 2.1083 |
| LTCLREPX | Equal variances assumed | .1639 | 7.168E-02 | .7179 |
| | Equal variances not assumed | .1651 | 6.889E-02 | .7206 |
| CUTSX | Equal variances assumed | .3179 | .1827 | 1.4357 |
| | Equal variances not assumed | .3211 | .1744 | 1.4440 |
| DETX | Equal variances assumed | .3088 | .2715 | 1.4886 |
| | Equal variances not assumed | .3107 | .2670 | 1.4931 |
| SUSPENX | Equal variances assumed | 5.873E-02 | -2.29E-02 | .2086 |
| | Equal variances not assumed | 5.888E-02 | -2.32E-02 | .2089 |

# Means

**Case Processing Summary**

| | Cases | | | | | |
|---|---|---|---|---|---|---|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| COMPSCOR * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| GR1X * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| GR2X * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| EFFORTX * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| CONDUCTX * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| ABSENCEX * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| LTSCHX * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| LTCLREPX * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| CUTSX * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| DETX * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |
| SUSPENX * OUTLYRA | 110 | 26.2% | 310 | 73.8% | 420 | 100.0% |

**Report**

| OUTLYRA | | COMPSCOR | GR1X | GR2X | EFFORTX | CONDUCTX | ABSENCEX |
|---|---|---|---|---|---|---|---|
| 1.00 | Mean | 17.2535 | 1.3380 | 1.4085 | 1.6338 | 1.0845 | 4.4930 |
| | N | 71 | 71 | 71 | 71 | 71 | 71 |
| | Std. Deviation | 4.1152 | .8442 | .8208 | .9891 | .2801 | 2.7144 |
| 2.00 | Mean | 45.5897 | 4.2308 | 5.0513 | 3.9231 | 1.9744 | 10.3590 |
| | N | 39 | 39 | 39 | 39 | 39 | 39 |
| | Std. Deviation | 18.5539 | 3.5427 | 4.0062 | 2.2986 | 1.4416 | 5.3875 |
| Total | Mean | 27.3000 | 2.3636 | 2.7000 | 2.4455 | 1.4000 | 6.5727 |
| | N | 110 | 110 | 110 | 110 | 110 | 110 |
| | Std. Deviation | 17.7854 | 2.6011 | 3.0154 | 1.9185 | .9787 | 4.7747 |

**Report**

| OUTLYRA | | LTSCHX | LTCLREPX | CUTSX | DETX | SUSPENX |
|---|---|---|---|---|---|---|
| 1.00 | Mean | 2.7887 | 1.0986 | 1.1549 | 1.2535 | 1.0000 |
| | N | 71 | 71 | 71 | 71 | 71 |
| | Std. Deviation | 1.9042 | .5893 | .4675 | .6028 | .0000 |
| 2.00 | Mean | 7.5897 | 2.3333 | 3.9487 | 4.7179 | 1.4615 |
| | N | 39 | 39 | 39 | 39 | 39 |
| | Std. Deviation | 3.7537 | 2.2164 | 4.7735 | 3.6989 | .7199 |
| Total | Mean | 4.4909 | 1.5364 | 2.1455 | 2.4818 | 1.1636 |
| | N | 110 | 110 | 110 | 110 | 110 |
| | Std. Deviation | 3.5446 | 1.5125 | 3.1443 | 2.7884 | .4794 |

**ANOVA Table**

| | | | Sum of Squares | df | Mean Square |
|---|---|---|---|---|---|
| COMPSCOR * OUTLYRA | Between | (Combined) | 20212.227 | 1 | 20212.227 |
| | Within Groups | | 14266.873 | 108 | 132.101 |
| | Total | | 34479.100 | 109 | |
| GR1X * OUTLYRA | Between | (Combined) | 210.644 | 1 | 210.644 |
| | Within Groups | | 526.810 | 108 | 4.878 |
| | Total | | 737.455 | 109 | |
| GR2X * OUTLYRA | Between | (Combined) | 334.048 | 1 | 334.048 |
| | Within Groups | | 657.052 | 108 | 6.084 |
| | Total | | 991.100 | 109 | |
| EFFORTX * OUTLYRA | Between | (Combined) | 131.925 | 1 | 131.925 |
| | Within Groups | | 269.248 | 108 | 2.493 |
| | Total | | 401.173 | 109 | |
| CONDUCTX * OUTLYRA | Between | (Combined) | 19.933 | 1 | 19.933 |
| | Within Groups | | 84.467 | 108 | .782 |
| | Total | | 104.400 | 109 | |
| ABSENCEX * OUTLYRA | Between | (Combined) | 866.197 | 1 | 866.197 |
| | Within Groups | | 1618.721 | 108 | 14.988 |
| | Total | | 2484.918 | 109 | |
| LTSCHX * OUTLYRA | Between | (Combined) | 580.224 | 1 | 580.224 |
| | Within Groups | | 789.267 | 108 | 7.308 |
| | Total | | 1369.491 | 109 | |
| LTCLREPX * OUTLYRA | Between | (Combined) | 38.378 | 1 | 38.378 |
| | Within Groups | | 210.977 | 108 | 1.953 |
| | Total | | 249.355 | 109 | |
| CUTSX * OUTLYRA | Between | (Combined) | 196.480 | 1 | 196.480 |
| | Within Groups | | 881.193 | 108 | 8.159 |
| | Total | | 1077.673 | 109 | |
| DETX * OUTLYRA | Between | (Combined) | 302.130 | 1 | 302.130 |
| | Within Groups | | 545.334 | 108 | 5.049 |
| | Total | | 847.464 | 109 | |
| SUSPENX * OUTLYRA | Between | (Combined) | 5.362 | 1 | 5.362 |
| | Within Groups | | 19.692 | 108 | .182 |
| | Total | | 25.055 | 109 | |

**ANOVA Table**

| | | | F | Sig. |
|---|---|---|---|---|
| COMPSCOR * OUTLYRA | Between Groups | (Combined) | 153.006 | .000 |
| | Within Groups | | | |
| | Total | | | |
| GR1X * OUTLYRA | Between Groups | (Combined) | 43.184 | .000 |
| | Within Groups | | | |
| | Total | | | |
| GR2X * OUTLYRA | Between Groups | (Combined) | 54.908 | .000 |
| | Within Groups | | | |
| | Total | | | |
| EFFORTX * OUTLYRA | Between Groups | (Combined) | 52.917 | .000 |
| | Within Groups | | | |
| | Total | | | |
| CONDUCTX * OUTLYRA | Between Groups | (Combined) | 25.486 | .000 |
| | Within Groups | | | |
| | Total | | | |
| ABSENCEX * OUTLYRA | Between Groups | (Combined) | 57.792 | .000 |
| | Within Groups | | | |
| | Total | | | |
| LTSCHX * OUTLYRA | Between Groups | (Combined) | 79.395 | .000 |
| | Within Groups | | | |
| | Total | | | |
| LTCLREPX * OUTLYRA | Between Groups | (Combined) | 19.646 | .000 |
| | Within Groups | | | |
| | Total | | | |
| CUTSX * OUTLYRA | Between Groups | (Combined) | 24.081 | .000 |
| | Within Groups | | | |
| | Total | | | |
| DETX * OUTLYRA | Between Groups | (Combined) | 59.835 | .000 |
| | Within Groups | | | |
| | Total | | | |
| SUSPENX * OUTLYRA | Between Groups | (Combined) | 29.409 | .000 |
| | Within Groups | | | |
| | Total | | | |

**Measures of Association**

| | Eta | Eta Squared |
|---|---|---|
| COMPSCOR * OUTLYRA | .766 | .586 |
| GR1X * OUTLYRA | .534 | .286 |
| GR2X * OUTLYRA | .581 | .337 |
| EFFORTX * OUTLYRA | .573 | .329 |
| CONDUCTX * OUTLYRA | .437 | .191 |
| ABSENCEX * OUTLYRA | .590 | .349 |
| LTSCHX * OUTLYRA | .651 | .424 |
| LTCLREPX * OUTLYRA | .392 | .154 |
| CUTSX * OUTLYRA | .427 | .182 |
| DETX * OUTLYRA | .597 | .357 |
| SUSPENX * OUTLYRA | .463 | .214 |

# T-Test

**Group Statistics**

| | OUTLYRA | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| COMPSCOR | 1.00 | 71 | 17.2535 | 4.1152 | .4884 |
| | 2.00 | 39 | 45.5897 | 18.5539 | 2.9710 |
| GR1X | 1.00 | 71 | 1.3380 | .8442 | .1002 |
| | 2.00 | 39 | 4.2308 | 3.5427 | .5673 |
| GR2X | 1.00 | 71 | 1.4085 | .8208 | 9.741E-02 |
| | 2.00 | 39 | 5.0513 | 4.0062 | .6415 |
| EFFORTX | 1.00 | 71 | 1.6338 | .9891 | .1174 |
| | 2.00 | 39 | 3.9231 | 2.2986 | .3681 |
| CONDUCTX | 1.00 | 71 | 1.0845 | .2801 | 3.324E-02 |
| | 2.00 | 39 | 1.9744 | 1.4416 | .2308 |
| ABSENCEX | 1.00 | 71 | 4.4930 | 2.7144 | .3221 |
| | 2.00 | 39 | 10.3590 | 5.3875 | .8627 |
| LTSCHX | 1.00 | 71 | 2.7887 | 1.9042 | .2260 |
| | 2.00 | 39 | 7.5897 | 3.7537 | .6011 |
| LTCLREPX | 1.00 | 71 | 1.0986 | .5893 | 6.994E-02 |
| | 2.00 | 39 | 2.3333 | 2.2164 | .3549 |
| CUTSX | 1.00 | 71 | 1.1549 | .4675 | 5.548E-02 |
| | 2.00 | 39 | 3.9487 | 4.7735 | .7644 |
| DETX | 1.00 | 71 | 1.2535 | .6028 | 7.154E-02 |
| | 2.00 | 39 | 4.7179 | 3.6989 | .5923 |
| SUSPENX | 1.00 | 71 | 1.0000 | .0000 | .0000 |
| | 2.00 | 39 | 1.4615 | .7199 | .1153 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | |
|---|---|---|---|
| | | F | Sig. |
| COMPSCOR | Equal variances assumed | 115.545 | .000 |
| | Equal variances not assumed | | |
| GR1X | Equal variances assumed | 65.163 | .000 |
| | Equal variances not assumed | | |
| GR2X | Equal variances assumed | 77.608 | .000 |
| | Equal variances not assumed | | |
| EFFORTX | Equal variances assumed | 29.260 | .000 |
| | Equal variances not assumed | | |
| CONDUCTX | Equal variances assumed | 86.023 | .000 |
| | Equal variances not assumed | | |
| ABSENCEX | Equal variances assumed | 9.175 | .003 |
| | Equal variances not assumed | | |
| LTSCHX | Equal variances assumed | 17.602 | .000 |
| | Equal variances not assumed | | |
| LTCLREPX | Equal variances assumed | 98.642 | .000 |
| | Equal variances not assumed | | |
| CUTSX | Equal variances assumed | 56.265 | .000 |
| | Equal variances not assumed | | |
| DETX | Equal variances assumed | 71.878 | .000 |
| | Equal variances not assumed | | |
| SUSPENX | Equal variances assumed | 209.127 | .000 |
| | Equal variances not assumed | | |

**Independent Samples Test**

| | | t-test for Equality of Means | | | |
|---|---|---|---|---|---|
| | | t | df | Sig. (2-tailed) | Mean Difference |
| COMPSCOR | Equal variances assumed | -12.370 | 108 | .000 | -28.3362 |
| | Equal variances not assumed | -9.411 | 40.066 | .000 | -28.3362 |
| GR1X | Equal variances assumed | -6.571 | 108 | .000 | -2.8927 |
| | Equal variances not assumed | -5.022 | 40.386 | .000 | -2.8927 |
| GR2X | Equal variances assumed | -7.410 | 108 | .000 | -3.6428 |
| | Equal variances not assumed | -5.614 | 39.761 | .000 | -3.6428 |
| EFFORTX | Equal variances assumed | -7.274 | 108 | .000 | -2.2893 |
| | Equal variances not assumed | -5.926 | 45.865 | .000 | -2.2893 |
| CONDUCTX | Equal variances assumed | -5.048 | 108 | .000 | -.8899 |
| | Equal variances not assumed | -3.815 | 39.583 | .000 | -.8899 |
| ABSENCEX | Equal variances assumed | -7.602 | 108 | .000 | -5.8660 |
| | Equal variances not assumed | -6.370 | 48.820 | .000 | -5.8660 |
| LTSCHX | Equal variances assumed | -8.910 | 108 | .000 | -4.8010 |
| | Equal variances not assumed | -7.476 | 48.972 | .000 | -4.8010 |
| LTCLREPX | Equal variances assumed | -4.432 | 108 | .000 | -1.2347 |
| | Equal variances not assumed | -3.413 | 40.975 | .001 | -1.2347 |
| CUTSX | Equal variances assumed | -4.907 | 108 | .000 | -2.7938 |
| | Equal variances not assumed | -3.645 | 38.401 | .001 | -2.7938 |
| DETX | Equal variances assumed | -7.735 | 108 | .000 | -3.4644 |
| | Equal variances not assumed | -5.807 | 39.112 | .000 | -3.4644 |
| SUSPENX | Equal variances assumed | -5.423 | 108 | .000 | -.4615 |
| | Equal variances not assumed | -4.004 | 38.000 | .000 | -.4615 |

**Independent Samples Test**

| | | t-test for Equality of Means | | |
|---|---|---|---|---|
| | | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | Lower | Upper |
| COMPSCOR | Equal variances assumed | 2.2908 | -32.8770 | -23.7955 |
| | Equal variances not assumed | 3.0109 | -34.4211 | -22.2513 |
| GR1X | Equal variances assumed | .4402 | -3.7653 | -2.0202 |
| | Equal variances not assumed | .5761 | -4.0567 | -1.7288 |
| GR2X | Equal variances assumed | .4916 | -4.6173 | -2.6684 |
| | Equal variances not assumed | .6489 | -4.9545 | -2.3312 |
| EFFORTX | Equal variances assumed | .3147 | -2.9131 | -1.6655 |
| | Equal variances not assumed | .3863 | -3.0670 | -1.5116 |
| CONDUCTX | Equal variances assumed | .1763 | -1.2392 | -.5405 |
| | Equal variances not assumed | .2332 | -1.3614 | -.4183 |
| ABSENCEX | Equal variances assumed | .7716 | -7.3955 | -4.3365 |
| | Equal variances not assumed | .9209 | -7.7168 | -4.0153 |
| LTSCHX | Equal variances assumed | .5388 | -5.8690 | -3.7330 |
| | Equal variances not assumed | .6422 | -6.0915 | -3.5105 |
| LTCLREPX | Equal variances assumed | .2786 | -1.7869 | -.6826 |
| | Equal variances not assumed | .3617 | -1.9653 | -.5042 |
| CUTSX | Equal variances assumed | .5693 | -3.9223 | -1.6653 |
| | Equal variances not assumed | .7664 | -4.3447 | -1.2428 |
| DETX | Equal variances assumed | .4479 | -4.3522 | -2.5767 |
| | Equal variances not assumed | .5966 | -4.6710 | -2.2578 |
| SUSPENX | Equal variances assumed | 8.511E-02 | -.6302 | -.2928 |
| | Equal variances not assumed | .1153 | -.6949 | -.2282 |

# Discriminant

**Analysis Case Processing Summary**

| Unweighted Cases | | N | Percent |
|---|---|---|---|
| Valid | | 223 | 53.1 |
| Excluded | Missing or out-of-range group codes | 196 | 46.7 |
| | At least one missing discriminating variable | 0 | .0 |
| | Both missing or out-of-range group codes and at least one missing discriminating variable | 1 | .2 |
| | Total | 197 | 46.9 |
| Total | | 420 | 100.0 |

**Group Statistics**

| SCOUTLYR | | Valid N (listwise) | |
|---|---|---|---|
| | | Unweighted | Weighted |
| 1.00 | GR1X | 110 | 110.000 |
| | GR2X | 110 | 110.000 |
| | EFFORTX | 110 | 110.000 |
| | CONDUCTX | 110 | 110.000 |
| | ABSENCEX | 110 | 110.000 |
| | LTSCHX | 110 | 110.000 |
| | LTCLREPX | 110 | 110.000 |
| | CUTSX | 110 | 110.000 |
| | DETX | 110 | 110.000 |
| | SUSPENX | 110 | 110.000 |
| 3.00 | GR1X | 113 | 113.000 |
| | GR2X | 113 | 113.000 |
| | EFFORTX | 113 | 113.000 |
| | CONDUCTX | 113 | 113.000 |
| | ABSENCEX | 113 | 113.000 |
| | LTSCHX | 113 | 113.000 |
| | LTCLREPX | 113 | 113.000 |
| | CUTSX | 113 | 113.000 |
| | DETX | 113 | 113.000 |
| | SUSPENX | 113 | 113.000 |
| Total | GR1X | 223 | 223.000 |
| | GR2X | 223 | 223.000 |
| | EFFORTX | 223 | 223.000 |
| | CONDUCTX | 223 | 223.000 |
| | ABSENCEX | 223 | 223.000 |
| | LTSCHX | 223 | 223.000 |
| | LTCLREPX | 223 | 223.000 |
| | CUTSX | 223 | 223.000 |
| | DETX | 223 | 223.000 |
| | SUSPENX | 223 | 223.000 |

## Analysis 1

## Summary of Canonical Discriminant Functions

**Eigenvalues**

| Function | Eigenvalue | % of Variance | Cumulative % | Canonical Correlation |
|---|---|---|---|---|
| 1 | .151[a] | 100.0 | 100.0 | .363 |

a. First 1 canonical discriminant functions were used in the analysis.

**Wilks' Lambda**

| Test of Function(s) | Wilks' Lambda | Chi-square | df | Sig. |
|---|---|---|---|---|
| 1 | .868 | 30.456 | 10 | .001 |

**Standardized Canonical Discriminant Function Coefficients**

| | Function |
|---|---|
| | 1 |
| GR1X | .212 |
| GR2X | -.249 |
| EFFORTX | 1.121 |
| CONDUCTX | -.602 |
| ABSENCEX | .077 |
| LTSCHX | .143 |
| LTCLREPX | .213 |
| CUTSX | .176 |
| DETX | .136 |
| SUSPENX | -.186 |

**Structure Matrix**

| | Function |
|---|---|
| | 1 |
| EFFORTX | .834 |
| GR2X | .686 |
| GR1X | .671 |
| LTSCHX | .557 |
| DETX | .493 |
| CUTSX | .440 |
| LTCLREPX | .416 |
| ABSENCEX | .391 |
| CONDUCTX | .330 |
| SUSPENX | .273 |

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions
Variables ordered by absolute size of correlation within function.

**Functions at Group Centroids**

| | Function |
|---|---|
| SCOUTLYR | 1 |
| 1.00 | .393 |
| 3.00 | -.382 |

Unstandardized canonical discriminant functions evaluated at group means

## Classification Statistics

**Classification Processing Summary**

| | | |
|---|---|---|
| Processed | | 420 |
| Excluded | Missing or out-of-range group codes | 0 |
| | At least one missing discriminating variable | 1 |
| Used in Output | | 419 |

**Prior Probabilities for Groups**

| SCOUTLYR | Prior | Cases Used in Analysis | |
|---|---|---|---|
| | | Unweighted | Weighted |
| 1.00 | .500 | 110 | 110.000 |
| 3.00 | .500 | 113 | 113.000 |
| Total | 1.000 | 223 | 223.000 |

**Classification Results[a]**

| | | SCOUTLYR | Predicted Group Membership | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 3.00 | |
| Original | Count | 1.00 | 55 | 55 | 110 |
| | | 3.00 | 19 | 94 | 113 |
| | | Ungrouped cases | 58 | 138 | 196 |
| | % | 1.00 | 50.0 | 50.0 | 100.0 |
| | | 3.00 | 16.8 | 83.2 | 100.0 |
| | | Ungrouped cases | 29.6 | 70.4 | 100.0 |

a. 66.8% of original grouped cases correctly classified.

Appendix Y

Discriminant Analysis on QSL as a Predictor of Traditional Indicators

# Discriminant

**Analysis Case Processing Summary**

| Unweighted Cases | | N | Percent |
|---|---|---|---|
| Valid | | 419 | 99.8 |
| Excluded | Missing or out-of-range group codes | 1 | .2 |
| | At least one missing discriminating variable | 0 | .0 |
| | Both missing or out-of-range group codes and at least one missing discriminating variable | 0 | .0 |
| | Total | 1 | .2 |
| Total | | 420 | 100.0 |

**Group Statistics**

| CSOUTLYR | | | Valid N (listwise) | |
|---|---|---|---|---|
| | | | Unweighted | Weighted |
| 1.00 | Q1 | 5 | 312 | 312.000 |
| | Q2 | 1 | 312 | 312.000 |
| | Q3 | 5 | 312 | 312.000 |
| | Q4 | 5 | 312 | 312.000 |
| | Q5 | 5 | 312 | 312.000 |
| | Q6 | 5 | 312 | 312.000 |
| | Q7 | 1 | 312 | 312.000 |
| | Q8 | 1 | 312 | 312.000 |
| | Q9 | 5 | 312 | 312.000 |
| | Q10 | 5 | 312 | 312.000 |
| | Q11 | 1 | 312 | 312.000 |
| | Q12 | 1 | 312 | 312.000 |
| | Q13 | 5 | 312 | 312.000 |
| | Q14 | 5 | 312 | 312.000 |
| | Q15 | 1 | 312 | 312.000 |
| | Q16 | 1 | 312 | 312.000 |
| | Q17 | 5 | 312 | 312.000 |
| | Q18 | 1 | 312 | 312.000 |
| | Q19 | 1 | 312 | 312.000 |
| | Q20 | 5 | 312 | 312.000 |
| | Q21 | 1 | 312 | 312.000 |
| | Q22 | 1 | 312 | 312.000 |
| | Q23 | 1 | 312 | 312.000 |
| | Q24 | 1 | 312 | 312.000 |
| | Q25 | 5 | 312 | 312.000 |
| | Q26 | 1 | 312 | 312.000 |
| | Q27 | 5 | 312 | 312.000 |

**Group Statistics**

| CSOUTLYR | | | Valid N (listwise) | |
|---|---|---|---|---|
| | | | Unweighted | Weighted |
| 2.00 | Q1 | 5 | 107 | 107.000 |
| | Q2 | 1 | 107 | 107.000 |
| | Q3 | 5 | 107 | 107.000 |
| | Q4 | 5 | 107 | 107.000 |
| | Q5 | 5 | 107 | 107.000 |
| | Q6 | 5 | 107 | 107.000 |
| | Q7 | 1 | 107 | 107.000 |
| | Q8 | 1 | 107 | 107.000 |
| | Q9 | 5 | 107 | 107.000 |
| | Q10 | 5 | 107 | 107.000 |
| | Q11 | 1 | 107 | 107.000 |
| | Q12 | 1 | 107 | 107.000 |
| | Q13 | 5 | 107 | 107.000 |
| | Q14 | 5 | 107 | 107.000 |
| | Q15 | 1 | 107 | 107.000 |
| | Q16 | 1 | 107 | 107.000 |
| | Q17 | 5 | 107 | 107.000 |
| | Q18 | 1 | 107 | 107.000 |
| | Q19 | 1 | 107 | 107.000 |
| | Q20 | 5 | 107 | 107.000 |
| | Q21 | 1 | 107 | 107.000 |
| | Q22 | 1 | 107 | 107.000 |
| | Q23 | 1 | 107 | 107.000 |
| | Q24 | 1 | 107 | 107.000 |
| | Q25 | 5 | 107 | 107.000 |
| | Q26 | 1 | 107 | 107.000 |
| | Q27 | 5 | 107 | 107.000 |
| Total | Q1 | 5 | 419 | 419.000 |
| | Q2 | 1 | 419 | 419.000 |
| | Q3 | 5 | 419 | 419.000 |
| | Q4 | 5 | 419 | 419.000 |
| | Q5 | 5 | 419 | 419.000 |
| | Q6 | 5 | 419 | 419.000 |
| | Q7 | 1 | 419 | 419.000 |
| | Q8 | 1 | 419 | 419.000 |
| | Q9 | 5 | 419 | 419.000 |
| | Q10 | 5 | 419 | 419.000 |
| | Q11 | 1 | 419 | 419.000 |
| | Q12 | 1 | 419 | 419.000 |
| | Q13 | 5 | 419 | 419.000 |
| | Q14 | 5 | 419 | 419.000 |
| | Q15 | 1 | 419 | 419.000 |
| | Q16 | 1 | 419 | 419.000 |
| | Q17 | 5 | 419 | 419.000 |
| | Q18 | 1 | 419 | 419.000 |
| | Q19 | 1 | 419 | 419.000 |
| | Q20 | 5 | 419 | 419.000 |
| | Q21 | 1 | 419 | 419.000 |
| | Q22 | 1 | 419 | 419.000 |
| | Q23 | 1 | 419 | 419.000 |
| | Q24 | 1 | 419 | 419.000 |
| | Q25 | 5 | 419 | 419.000 |
| | Q26 | 1 | 419 | 419.000 |
| | Q27 | 5 | 419 | 419.000 |

# Summary of Canonical Discriminant Functions

**Eigenvalues**

| Function | Eigenvalue | % of Variance | Cumulative % | Canonical Correlation |
|---|---|---|---|---|
| 1 | .179[a] | 100.0 | 100.0 | .390 |

a. First 1 canonical discriminant functions were used in the analysis.

**Wilks' Lambda**

| Test of Function(s) | Wilks' Lambda | Chi-square | df | Sig. |
|---|---|---|---|---|
| 1 | .848 | 66.480 | 27 | .000 |

**Standardized Canonical Discriminant Function Coefficients**

| | | Function |
|---|---|---|
| | | 1 |
| Q1 | 5 | .190 |
| Q2 | 1 | -.149 |
| Q3 | 5 | .207 |
| Q4 | 5 | .025 |
| Q5 | 5 | -.007 |
| Q6 | 5 | .381 |
| Q7 | 1 | -.013 |
| Q8 | 1 | -.065 |
| Q9 | 5 | .144 |
| Q10 | 5 | -.313 |
| Q11 | 1 | -.018 |
| Q12 | 1 | .077 |
| Q13 | 5 | -.245 |
| Q14 | 5 | -.137 |
| Q15 | 1 | -.307 |
| Q16 | 1 | .222 |
| Q17 | 5 | -.041 |
| Q18 | 1 | .040 |
| Q19 | 1 | -.037 |
| Q20 | 5 | .423 |
| Q21 | 1 | .344 |
| Q22 | 1 | .222 |
| Q23 | 1 | -.008 |
| Q24 | 1 | -.201 |
| Q25 | 5 | -.208 |
| Q26 | 1 | .357 |
| Q27 | 5 | -.011 |

**Structure Matrix**

| | | Function |
|---|---|---|
| | | 1 |
| Q21 | 1 | .581 |
| Q20 | 5 | .571 |
| Q22 | 1 | .544 |
| Q26 | 1 | .499 |
| Q16 | 1 | .483 |
| Q9 | 5 | .477 |
| Q6 | 5 | .423 |
| Q3 | 5 | .419 |
| Q1 | 5 | .390 |
| Q27 | 5 | .367 |
| Q12 | 1 | .350 |
| Q24 | 1 | .348 |
| Q8 | 1 | .347 |
| Q19 | 1 | .344 |
| Q18 | 1 | .332 |
| Q23 | 1 | .306 |
| Q5 | 5 | .289 |
| Q11 | 1 | .281 |
| Q4 | 5 | .266 |
| Q7 | 1 | .241 |
| Q17 | 5 | .236 |
| Q25 | 5 | .197 |
| Q15 | 1 | .174 |
| Q13 | 5 | .166 |
| Q14 | 5 | .139 |
| Q2 | 1 | .097 |
| Q10 | 5 | -.049 |

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions
Variables ordered by absolute size of correlation within function.

**Functions at Group Centroids**

| | Function |
|---|---|
| CSOUTLYR | 1 |
| 1.00 | .247 |
| 2.00 | -.721 |

Unstandardized canonical discriminant functions evaluated at group means

# Classification Statistics

**Classification Processing Summary**

| | | |
|---|---|---|
| Processed | | 420 |
| Excluded | Missing or out-of-range group codes | 0 |
| | At least one missing discriminating variable | 0 |
| Used in Output | | 420 |

**Prior Probabilities for Groups**

| CSOUTLYR | Prior | Cases Used in Analysis | |
|---|---|---|---|
| | | Unweighted | Weighted |
| 1.00 | .500 | 312 | 312.000 |
| 2.00 | .500 | 107 | 107.000 |
| Total | 1.000 | 419 | 419.000 |

**Classification Results[a]**

| | | CSOUTLYR | Predicted Group Membership | | Total |
|---|---|---|---|---|---|
| | | | 1.00 | 2.00 | |
| Original | Count | 1.00 | 215 | 97 | 312 |
| | | 2.00 | 33 | 74 | 107 |
| | | Ungrouped cases | 1 | 0 | 1 |
| | % | 1.00 | 68.9 | 31.1 | 100.0 |
| | | 2.00 | 30.8 | 69.2 | 100.0 |
| | | Ungrouped cases | 100.0 | .0 | 100.0 |

a. 69.0% of original grouped cases correctly classified.

Biographical Data

| | |
|---|---|
| Name | Sandra M. Lazar |
| High School | Northeast High School<br>Philadelphia, PA |
| Undergraduate | Bachelor of Science<br>Education<br>Temple University<br>Philadelphia, PA |
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